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The Inauguration of a Serious Effort to Establish a System of Education for Dental Hygienists.

In September last we published an illustrated description of the office building and offices of Dr. A. C. Fones, of Bridgeport, and stated that future historians would point out this building as the place in which the first training school for dental nurses had come into existence. It is with pleasure that we open the 1914 volume of ITEMS OF INTEREST with the announcement that this venture has been successfully started. It may be of interest to future students of this subject to set down here the true origin and scope of this enterprise.

Dr. Fones has long been known as an ardent advocate of the advantages of mouth hygiene. He tested the possibilities first in his own practice, and during the last two years has made frequent exhibits of patients who had been in the care of his assistants and himself for periods of various lengths, and all the practitioners who visited Bridgeport to inspect these mouths, returned to their homes converted to the theory, or at least admitting that, "there is something in it." This latter class, however, were few in numbers, and confined to those who are irrevocably opposed to the "dental nurse," even though compelled reluctantly to admit the value of the work that she might do. For in Dr. Fones's office they saw gums that had been diseased restored to health; and gums that never had been diseased so improved in color,

tone, and beauty, that they compared with ordinary tissue, as the most cultivated chrysanthemum compares with the daisies of the field.

Effort for School Clinics.

Having proven the advantage of this system in private practice, Dr. Fones became inspired to extend it for the benefit of the community, by applying it in the public schools. He believed that the great

and baneful tide of dental caries could only be stemmed at its source, and that in this connection at least the axiom should read, "An ounce of prevention is worth ten thousand pounds of cure," a logical deduction from which would be that one properly managed prophylactic school clinic, would do more for the children and for the townspeople, than forty curative dental clinics, however meritorious these latter might be.

To test out this theory, he urged the authorities of Bridgeport to appropriate money, and to grant permission for the establishment of a prophylactic school clinic. But, unfortunately, the Board of Education included a dentist as one of its members, and this man was not only appointed to the school clinic, but was made chairman of the committee. Every man is entitled to hold opinions, and, of course, this gentleman had the right to have his own views on the subject of school clinics. Unfortunately his ideas and those of Dr. Fones did not harmonize, and consequently Dr. Fones resigned from a committee brought into existence mainly through his efforts, and to do this just when he had hoped to see this prophylactic experiment seriously tested by application in a public school, was a grievous disappointment not only to Dr. Fones, but to all who are watching his efforts.

The great majority of men, similarly placed, would have abandoned a project received with so little appreciation and comprehension, but Dr. Fones is not of the character that is easily discouraged. Indeed, when facing the situation thus brought about, he finally concluded that it was possibly just as well that the experiment had been postponed; "postponed" is the only word he would use. Had the clinic been started with the September school term, it would have been difficult to find properly educated women to undertake the care of the children. Hence he decided to begin again, and to begin from a new starting point; to begin by properly educating a class of women who might then be relied on as really competent "trained dental nurses."

Nurse, Hygienist, or What?

Dr. Fones then concluded to invite the co-operation of the highest grade of competent teachers, who should donate their services for a single year, not only in training the women, but likewise, if possible, to establish a curriculum or system of educa-



tion for this class of dental worker. Thus this "school" is not at present expected to continue after this year; and, indeed, even if a training school of this character should become a permanent fixture in Bridgeport, it is manifest that it cannot be conducted with the present staff of lecturers. That the course, therefore, might have a more permanent influence than the mere education of a single class, Dr. Fones decided to record all the lectures stenographically, and after proper revision, to have these lectures published in book form as a foundation for a system of training of dental nurses.

We say "dental nurses," because that term is best known at present in dental world, but in all his talks with medical teachers, to whom he outlined his plans, Dr. Fones met with strenuous objection to the term "dental nurse." Medical men and trained medical nurses all oppose the term as a misnomer. Studying this aspect of the problem and finally concluding that these women, thus educated, must eventually be something more than merely workers in the mouth; that they, indeed, must themselves become educators, educating first the patients passing through their hands; and secondly, educating other similar workers by assuming places as teachers in training schools, Dr. Fones finally decided to call the members of this first class, "trained dental hygienists."

But however objectionable or unsatisfactory the term "dental nurse" may be, it does not seem to the writer that the term "dental hygienist" quite supplies the need. When these women take their place finally in the great band of workers for the salvation of individual and public health, it hardly seems possible that the name "dental hygienist" or "dental prophylacticist" would be as easily adopted and comprehended as the commoner term "dental nurse."

This is a digression, but it may not be amiss to register a passing thought here. Let us imagine the extreme fruition and universal adoption of this method of attacking unhygienic mouth conditions. New York City alone would require at least three thousand trained women for its public school prophylactic clinics, whereas not more than one thousand would find places in private offices. The three thousand would be working with and upon children, many of immature minds. These "kiddies" have already learned to take their physical troubles to the "medical nurse." Will it not be easier to teach these youngsters the meaning of the term "dental nurse," than to train them to carry their dental aches and pains to a "hygienist" or to a "prophylacticist," and is it not primarily for the infant citizens that this new army of workers is being enlisted?



The Inauguration of the Fones School.

Dr. Fones's indefatigable efforts to obtain a teaching staff, finally resulted in the subjoined notable list. When it is remembered that these men have joined forces, not to form a faculty of a medical, or of a dental college, but solely for the purpose of experimentally training a small band of women, who shall go out into the world as the pioneers of a great work, the importance of the men and their willingness to give of their time for the possible betterment of the health of little children, makes this list of names most impressive. The following men have agreed to lecture in the Fones School for the Education of Dental Hygienists:

Lecture Staff.

Raymond C. Osburn, Ph.D., Professor in Barnard College, Columbia University, New York City.

Yandell Henderson, Ph.D., Professor of Physiology, Medical Department of Yale University.

Alexander M. Prince, M.D., Instructor in Medicine and Physiology, Medical Department of Yale University.

L. F. Rettger, Ph.D., Assistant Professor of Bacteriology, Sheffield Scientific School of Yale University.

R. H. W. Strang, M.D., D.D.S., Bridgeport, Conn., Specialist in Orthodontia.

Dr. George M. MacKee, Instructor in Dermatology, College of Physicians and Surgeons, New York City.

Edward C. Kirk, Sc.D., D.D.S., Dean of Dental Department, University of Pennsylvania.

Eugene H. Smith, D.M.D., Dean of Dental Department, Harvard University.

M. L. Rhein, M.D., D.D.S., New York City.

R. G. Hutchinson, Jr., D.D.S., New York City, Specialist in Treatment of Pyorrhea Alveolaris.

R. Ottolengui, M.D.S., New York City, Editor of ITEMS OF INTEREST.

Chas. M. Turner, M.D., D.D.S., Professor of Mechanical Dentistry and Metallurgy, School of Dentistry, University of Pennsylvania.

Russell H. Chittenden, Ph.D., L.L.D., ScD., Director of Sheffield Scientific School of Yale University.

M. I. Schamberg, M.D., D.D.S., New York City, Specialist in Oral Surgery.

Herman E. S. Chayes, D.D.S., New York City.



Exclusive Contributions

C. Ward Crampton, M.D., Hygienist and Director of Physical Training, Public School System, New York City.

Professor Irving Fisher of Yale University, Chairman of Committee of One Hundred on National Hygiene.

Dr. William G. Anderson, Professor and Director of Yale University Gymnasium.

Thaddeus B. Hyatt, D.D.S., New York City.

Alfred C. Fones, D.D.S., Bridgeport, Conn.

Lecture Course.

The following epitome of the lecture course will give some idea of the curriculum and scope of teaching which has been planned for the class:

1. *Anatomy*.—By Raymond C. Osburn, Ph.D., Professor of Barnard College, Columbia University, New York City.
2. *Physiology and Visceral Anatomy*.—By Yandell Henderson, Ph.D., Professor of Physiology, Medical Department of Yale University, and Alexander M. Prince, M.D., Instructor in Medicine and Physiology, Medical Department of Yale University.
3. *Bacteriology and Sterilization*.—By L. F. Rettger, Ph.D., Assistant Professor of Bacteriology, Sheffield Scientific School of Yale University.
4. *Anatomy and Histology of the Teeth and Jaws. Nomenclature*.—By R. H. W. Strang, M.D., D.D.S., Bridgeport, Conn., Specialist in Orthodontia.
5. *The Skin in Health and Disease* (also giving a Brief Outline of Symptoms and Diagnosis of Chicken Pox, Small Pox, Measles, Scarlet Fever, etc.).—By Dr. G. George M. MacKee, Instructor in Dermatology, College of Physicians and Surgeons, New York City.
6. *Oral Secretions. Deposits and Accretions of the Teeth*.—By Edward C. Kirk, Sc.D., D.D.S., Dean of Dental Department of University of Pennsylvania.
7. *Dental Pathology*.
 - (a) *Dental Caries*.—By Eugene H. Smith, D.M.D., Dean of Dental Department of Harvard University.
 - (b) *Alveolar Abscess and Odontalgia*.—By M. L. Rhein, M.D., D.D.S., New York City.
 - (c) *Pyorrhea Alveolaris*.—By R. G. Hutchinson, Jr., D.D.S., New York City, Specialist.
 - (d) *Malocclusion*.—By R. Ottolengui, M.D.S., Editor of ITEMS OF INTEREST.



8. *The Teeth as a Masticating Machine.*—By Chas. Turner, M.D., D.D.S., Professor of Mechanical Dentistry and Metallurgy, School of Dentistry, University of Pennsylvania.
9. *The Chemistry of Food and Nutrition.*—By Russell H. Chittenden, Ph.D., L.L.D., Sc.D., Director of Sheffield Scientific School of Yale University.
10. *Oral Surgery That Might Have Been Prevented by the Dental Hygienist.*—By M. J. Schamberg, M.D., D.D.S., New York City, Specialist in Oral Surgery.
11. *The Sanitary Aspect of Dental Operations.*—By Herman E. S. Chayes, D.D.S., New York City.
12. *Hygiene.*
 - (a) *Factors in Personal Hygiene.*—By C. Ward Crampton, M.D., Hygienist and Director of Physical Training, Public School System, New York City.
 - (b) *Posture and Fresh Air.*—By Professor Irving Fisher of Yale University, Chairman of Committee of One Hundred on National Hygiene.
 - (c) *Lengthening the Life of the Resistive Forces of the Body.*—By Dr. William Guilbert Anderson, Professor and Director of Yale University Gymnasium.
13. *The Teaching of Mouth Hygiene to School Children.*—By Thaddeus B. Hyatt, D.D.S., Brooklyn, N. Y.
14. *The Psychology of Handling Children.*—By Edward C. Kirk, Sc.D., D.D.S.
15. *Dental Prophylaxis.*—By Alfred C. Fones, D.D.S., Bridgeport, Conn.

One or two lectures will be added to the course later.

The first meeting of the class occurred on the evening of November 13, 1913. Dr. Fones has converted his beautiful garage into a remarkably fine lecture room. The floor is covered with crash. At one end is a platform with aluminum surface screen for lantern projections, and the lecturers have at their service, a lantern, in connection with which they may use regular lantern slides, microscopic specimens, or solid objects or prints. The students have large, comfortable chairs, each with table arm for use in making notes.

At this first meeting of the class addresses were made by Drs. A. C. Fones, E. S. Gaylord, M. L. Rhein, and R. Ottolengui.

It had been intended to limit the class to thirty, but the number was increased to thirty-two in order to accept applications from teachers who are connected with the Bridgeport public schools. The following is a list of the members of this first class:



Exclusive Contributions

Members of Course for Dental Hygienists.

Miss Ruby Boerum	Bridgeport, Conn.
Miss Enid Cortright (with Dr. A. C. Fones).....	Bridgeport, Conn.
Miss Blanche Darling	Bridgeport, Conn.
Miss Carolyn Frederick (with Dr. L. E. Sage).....	Bridgeport, Conn.
Mrs. Allen Ganung (with Dr. T. A. Ganung).....	Bridgeport, Conn.
Miss Rena Hubbell	Bridgeport, Conn.
Miss Rose House (Vis. Prin. Bridgep't Pub. Sch.)....	Bridgeport, Conn.
Miss Flora Harlow (Teacher Bridgep't Pub. Sch.)....	Bridgeport, Conn.
Miss Maude Hugo (with Dr. R. H. W. Strang).....	Bridgeport, Conn.
Miss Lillian Kerr (with Dr. D. B. Hawley).....	Bridgeport, Conn.
Miss Florence Harris	Bridgeport, Conn.
Miss Hazel Lockwood	Bridgeport, Conn.
Mrs. Haviland Robinson	Bridgeport, Conn.
Miss Gladys Reilly (with Dr. W. J. McLaughlin)....	Bridgeport, Conn.
Mrs. Hubert Hart (Regist. Nurse in Pub. Schools) ..	Bridgeport, Conn.
Mrs. Irene Newman (with Dr. A. C. Fones).....	Bridgeport, Conn.
Miss Grace Lyon (with Dr. Geo. Fahy).....	New Haven, Conn.
Miss Edna Lassen (with Dr. A. W. Crosby).....	New Haven, Conn.
Miss Madeline Sinclair (with Dr. D. W. Johnston) ..	New Haven, Conn.
Miss Edmere Champagne (with Dr. E. R. Bryant) ..	New Haven, Conn.
Miss Louise Borchardt	Waterbury, Conn.
Miss Louise Rich (with Dr. C. E. Gates).....	Waterbury, Conn.
Miss A. K. Moores (with Dr. J. D. Hertz).....	Stamford, Conn.
Miss Mary Russell (with Dr. O. T. Rule).....	Stamford, Conn.
Miss Mary Harrington (with Dr. J. L. Loftus)	Meriden, Conn.
Mrs. J. L. Loftus (with Dr. J. L. Loftus).....	Meriden, Conn.
Miss Louise Birdsall (with Dr. A. W. Costeles).....	Hartford, Conn.
Miss Clara Harris (with Dr. A. W. Crosby)	New London, Conn.
Miss Bessie Proctor.....	New York City, N. Y.
Miss Sarah Stewart (with Dr. N. A. Estes).....	Newport, R. I.
Miss Maude Sullivan	New Milford, N. Y.
Miss Ruby Guilbert	Milford, Conn.

Of this class, Dr. Fones writes as follows: "There will be about fourteen or fifteen of these women open for engagements after the first of June, but I would like to keep six or seven for Bridgeport if I am able to secure an appropriation for a prophylactic dental clinic."

In addition it may be added, that a movement is on foot which, if successful, will engage the services of two or three of these trained women in a prophylactic clinic projected for the public schools of one of New York's smaller cities, where it is hoped that a test of this kind can be successfully carried through.



In addition to the lecture course, the class is to have practical work, beginning on manikins, such as have been devised for use in dental colleges, and later including actual work in the mouth.

Dr. Fones merits the gratitude of the profession for his arduous and self-sacrificing labors to test the value of the services of women trained to give prophylactic care to the human mouth.

A New Gospel and an Appeal for Higher Art in Amalgam Fillings.

By WILLIAM R. POND, D.D.S., Rutland, Vermont.

Since the appearance of Dr. Young's article, "*Restoration of Occlusion by the Casting Process*," and of Dr. Ottolengui's papers and editorials on the same subject, it would seem useless on the part of another to dwell, more than briefly, on the very obvious advantages of this line of procedure in filling teeth, over the older method of flat, polished occlusal surfaces. The idea of restoring correct tooth forms and proper occlusion by fillings, is bound to appeal to the progressive dentist, and in reading and considering the convincing evidence in its favor he can only wonder why it was not thought of before. It does not seem credible that the only man who puts a proper valuation on normal occlusion and things relating to it, is the orthodontist, nor do I believe this to be the case. Controversy is bound to come, but it is safe to predict that this will only tend to strengthen a theory which is so obviously correct, as the dogma that we should restore proper tooth forms and proper occlusal surfaces in our filling work.

Why have we, for years, tried to carve proper tooth forms and occlusion in our crown and bridgework and rightly ridiculed the "umbrella ferrule" gold crown, and why have we so recently called for "anatomical teeth" for platework and done so much with anatomical articulation? Because we recognize advances when we see them. We must recognize the same points in our filling work, and I believe we will. All steps in advance, all new ideas, all improvements, meet with resistance and stir up controversy and ridicule; but things which are fundamentally, theoretically and mechanically correct are, like true character, only strengthened by resistance and made more secure by adverse criticism.

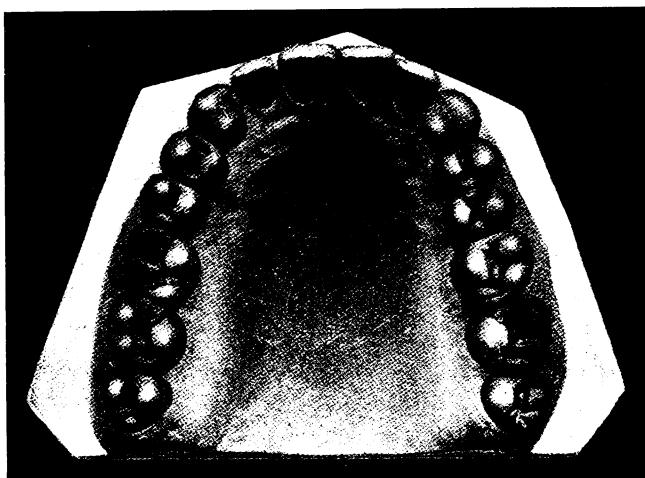


Fig. 1.

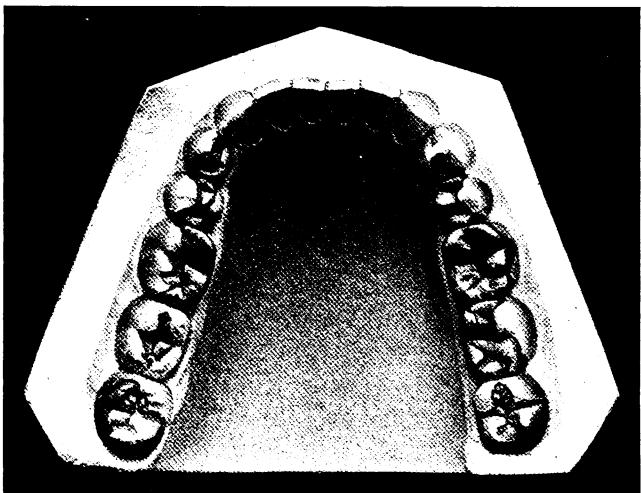


Fig. 2.



To use a homely comparison: time was when the sporting journals were rife with articles on the relative merits of breech and muzzle loading guns. There was as much argument against the breech loaders as for them; but what was mechanically correct and in line with true progress was the more quickly adopted by reason of the controversy. Do sportsmen now use muzzle loading guns? Decidedly not. So it will

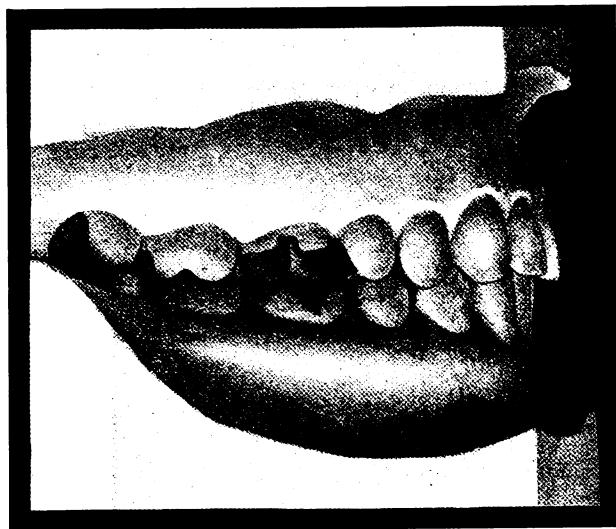


Fig. 3.

be with *our* progress; the things which are fundamentally correct are bound to survive, and among these things will be found the basic principles in filling work set forth in Dr. Young's article on "*Restoration of Occlusion by the Casting Process*" and in Dr. Ottolengui's editorials supporting that article.

**The Cast Gold
Inlay Versus
Amalgam.**

So far let us agree with what is so clearly right regarding the necessity of restoring tooth forms, and as far as possible, normal occlusion in our filling work. But is it always necessary to resort to the cast inlay in order to attain this desirable result? We are told in Dr. Young's article, in Dr. Ottolengui's writings on the subject, and in the reports and discussions of numerous others, that in order to restore correct occlusal surfaces in our filling work we *must* use the cast gold inlay. This statement is somewhat arbitrary and I think could be better modified to read, "the work *may* be done by the use of the cast gold inlay."



There is no denying the results obtained with the cast gold inlay, but how about amalgam work? Must this great filling material be thrown into the scrap heap? Are the men who prefer to use amalgam and the men who must use amalgam to feel that they are only putting in substitute fillings at best; fillings that are so inferior that they should not be there at all? Decidedly the amalgam filling should not and will not go out of use. What, then, should be done about it? The answer is plain. Raise the standard of amalgam work until this filling is fit to stand beside its brother, the gold inlay.

If we admit that in order to make a good restoration the filling must be carved to reproduce the natural occlusal surface, clearly we must carve amalgam. One of the principal objects of this paper is to show that amalgam may be carved. If this can be done and if correct approximal contact points can be secured, what can be said against these fillings, except from the standpoint of aesthetics? Granted, that the gold restorations are more pleasing to the eye, where else is their advantage over amalgam? Surely not in any tooth-saving property exerted by the gold in the filling, for the inlay is cemented in, and this feature may also be added to the amalgam restoration. May we not say that amalgam, correctly used, has, in some cases, distinct advantages over the gold inlay? The fact that these fillings may be inserted and finished at one sitting must appeal in some cases, as does the lessened wear and tear on patient and operator and the lessened expense to both. I have seen inlay cases where a temporary filling was inserted between appointments, after cavity preparation, where the tooth was in such a state of irritation that it hardly seemed advisable to cement in the inlay. This surely is a condition to be avoided, especially in young patients.

Description of Illustrations. In order to demonstrate the possibilities of this class of work, I made occluding models of a good set of teeth, in good occlusion, and carved numerous cavities in the plaster teeth. I then restored these teeth with amalgam, carving the masticating surfaces as nearly in imitation of normal as I could. These restored models I used in a table clinic at the last meeting of the Northeastern Dental Society. Figs. 1 and 2 show the occlusal surfaces of these two casts, and Fig. 3 the profile view of the side which contains the largest fillings. These models have been much commended, but the criticism has been made that while such carved amalgam restorations might be possible on plaster casts, such results could not be expected when working in the mouth, with the probability of having the amalgam crushed out of shape during the first twenty-four hours. It is for this reason that I have prepared this description of the technique of making amalgam restorations of occlusal surfaces, and I will now offer a few examples from actual cases.



The following illustrations have been obtained by taking impressions of finished work in the mouth and making casts therefrom. The region occupied by the amalgam fillings were then colored with India ink wash and the casts photographed.

Fig. 4 shows casts of the left upper and lower molar region of the mouth of a patient whose lower first molar was badly wrecked. The

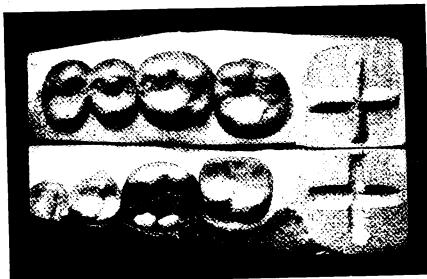


Fig. 4.

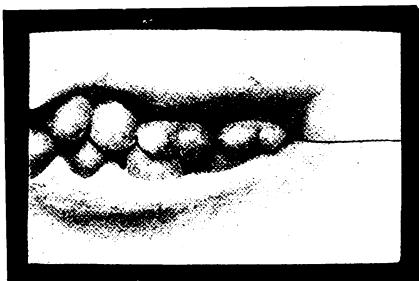


Fig. 5.

restoration is seen to include the mesial, distal and morsal surfaces. The cusps of all the teeth are seen to be extremely long; consequently the lingual cusp of the upper first molar requires an extremely deep central fossa in the lower molar for its reception. Fig. 5 shows the two casts occluded, and we note the great depth of the overbite. As the cusps of the opposing molars interdigitate perfectly, the carving of the amalgam must have been correct. Thus the function of these teeth have been fully restored, a result which is impossible where the amalgam is simply smoothed off with wet cotton, as is so often done.

Fig. 6 shows casts of the upper and lower teeth on the right side of another case. Amalgam restorations are noted in the second upper molar and in both upper bicuspids. The first upper molar is a gold shell crown, and whilst it is very much better than the average of

stamped crowns, its rounded cusps and sulci renders it easily detected when compared with the adjacent teeth. In the illustration of the lower teeth we observe almost a complete tooth (lower first molar) restored with amalgam. There is also a carved amalgam restoration in the second molar. Fig. 7 shows these two casts as they appear when occluded.

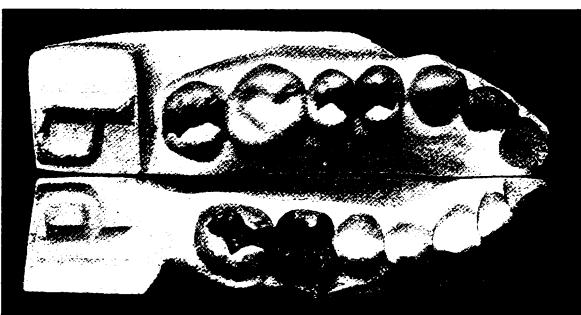


Fig. 6.

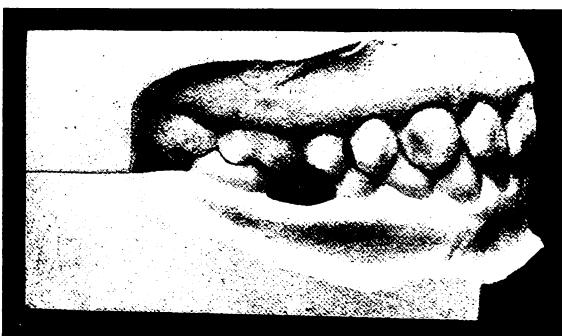


Fig. 7.

Fig. 8 shows upper and lower casts of still another case. In the second molar we see amalgam fillings properly carved, whilst adjacent to them we see flat fillings in the first molars and second bicuspids. A comparison shows at a glance that the teeth filled with properly carved restorations of cusps and sulci are better masticating organs than those with the flat fillings. Indeed, this is so true and of so much importance to the patient that a conscientious operator would be justified in removing the fillings from the first molars and second bicuspids in order to replace them with fillings of proper form.

Fig. 9 shows an example of carving an occlusal filling in a tooth



having low cusps, and by comparing the filled tooth with its normal neighbor it will be seen that Nature has been fairly well followed.

Figs. 10 and 11 show the occlusal views of a case of bad malocclusion. All of the molars except one were carious, those in the lower jaw being exceptionally bad. On the left side may be seen two large ap-

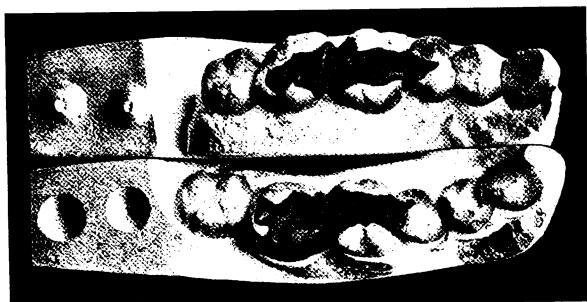


Fig. 8.

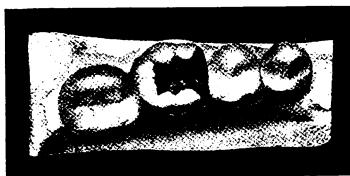


Fig. 9.

proximating fillings, with contact points, approximal dimensions and morsal surfaces restored. On the right side the entire lingual half of the first molar has been built up, while the restoration of the second molar includes the distal buccal quarter of the tooth. These teeth all have extremely long cusps, which will be of great assistance in retention after the malocclusion shall have been corrected; yet note to what extent and with what success these teeth have been restored to normal form and usefulness with amalgam, in spite of the alleged possibility of disturbance during the first twenty-four hours. These cases, I believe, at least, prove the possibility of doing this class of work with amalgam. We must also admit that it is desirable when working with amalgam to work in this manner. Therefore, I say that what is both possible and desirable should be done.

It is said that about seventy-five per cent. of our filling work is done with amalgam. Why, then, devote all our attention to perfecting a technique for the remaining twenty-five per cent? Let us have a definite technique for amalgam work, and let us keep on perfecting this

until we reach as near a uniform result of excellency as it is possible to attain.

With this idea of evolving a better technique for amalgam work the writer will make some suggestions and give some description of the work

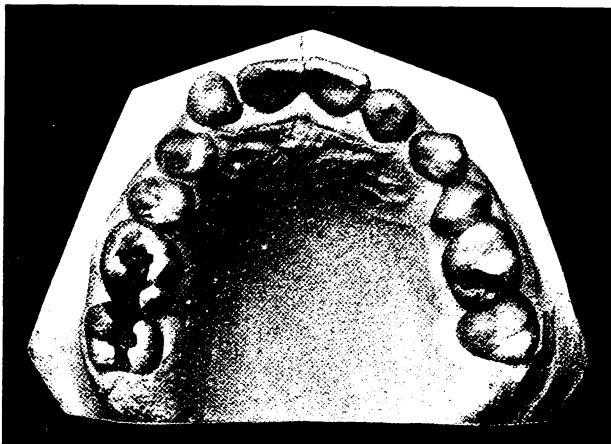


Fig. 10.

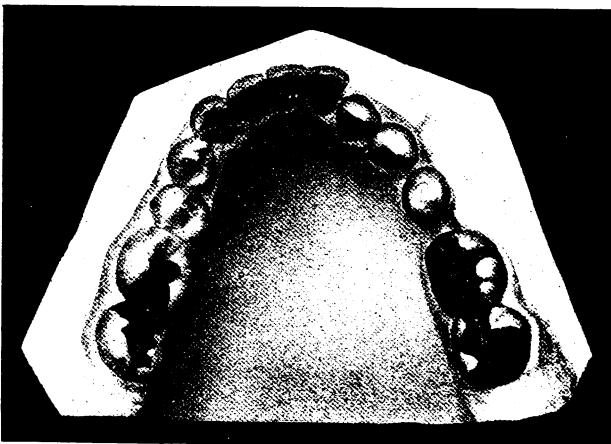


Fig. 11.

as he sees it. It is to be hoped these suggestions may give rise to enough discussion to bring improvement where it is so much needed.

Regarding the alloy to be used much might be said, but as this subject is being widely discussed and investigated, we shall undoubtedly have more uniform formulas in the near future. Dr. Marcus

**Choice of
Alloy for
Amalgam Filling.**



L. Ward, in a recent paper, makes the statement that he is convinced the reputable supply houses are making honest effort to put good alloys on the market. This is certainly a reassuring report from a man of standing. The writer can only say, that having used one alloy for fourteen years, he knows it to be a uniform product, and to his familiarity with the working properties of this alloy he attributes no small share of his success with amalgam as a filling material. This is a so-called quick setting alloy, but is what the manufacturers term "slower setting."

Cavity Preparation for Amalgam.

Cavity preparation for amalgam work should be similar to that for inlays. The margins should be clean cut, polished and well extended, and in their preparation the mounted carborundum stones will be found invaluable. In deep cavities, build up with cement to obtain a typical preparation with flat seat. Little or no undercut is necessary if the first layer of amalgam is cemented in as is the writer's invariable custom. The zinc cements are used, except in a few cases, where the oxy-phosphate of copper seems advisable.

Use of Matrices.

The matrix is always indicated where any contour is to be made. The Ivory matrix holders, with thin steel matrix band, or those cut from celluloid strips are very satisfactory when used in conjunction with wedges placed at the cervix. In extreme restorations, make a soldered matrix of thin orthodontia band material, made either by "pinching" and soldering, as the orthodontist makes a plain band, or cut and soldered from a wire measurement of the tooth. These matrices can be accurately fitted, contoured and wedged, and at the desired time can be quickly split and removed.

Technic for Large Amalgam Restoration.

If a large restoration is to be made, study carefully the occlusion and the movements of the mandible, and if necessary, take a wax or modeling compound "bite" and run plaster casts for study models. A hasty filling of temporary stopping, allowing the patient to close the teeth together while the material is still plastic, will show any abnormal conditions of "bite," which can be allowed for in the amalgam restoration. In amalgam work the rubber dam is seldom indicated, as so many of the fillings extend below the gum. Cotton rolls and the saliva ejector are perfectly adequate except in rare cases.

Dry out the cavity with warm alcohol, and then, mixing a white cement to about the same consistency as for setting inlays (do not use a



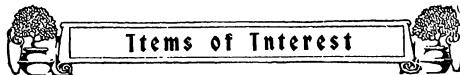
hydraulic cement, as all moisture is excluded), and with a fine instrument line the cavity with the cement. Next apply the matrix, if a compound cavity is to be filled. In difficult cases the matrix should be applied before the cement lining. Now mix the amalgam, everything being in readiness for rapid work, or have the assistant do the mixing while the matrix is being applied. Pack the amalgam, using large pieces and ample pressure, working the first pieces into the cement, covering all surfaces, floor, walls and margins, and wiping away the excess of cement. Then fill slightly to excess, using large pieces and sufficient pressure to produce a homogeneous mass. Contour ample cusps. Except in extreme restorations, where it has been decided to leave a soldered matrix, to be removed at a future sitting, the matrix is immediately removed, being withdrawn from the side, either buccally or lingually, as seems advisable. The margins which were hidden by the matrix are now carefully examined and if any lack of contour shows, a small quantity of filling material may be added. The occlusal surface of the filling is now roughly "troughed out" and wiped over with a pledget of cotton. This gives a frosted surface which will show every contact point when the teeth are brought together. The patient should be told to "close" carefully (and this should be done as soon as possible, and before the filling material has commenced to crystalize), using very little pressure. The occlusal surface is gradually worked down, noting the contact each time of closing. As soon as the teeth can be brought comfortably together, the movements of the mandible are noted and allowed for when necessary.

The filling is now gone over with a large ball burnisher and allowed to set for about ten minutes before further work on it is done. At this time the cervical margins are carefully examined, and as the filling material is now at a more granular stage, any small particles which may have been forced under the gum may be removed with a fine-pointed scaler, and these margins rubbed over carefully with a file (made dull), such as is used in the sets of scaling instruments.

Carving Occlusal Surfaces in Amalgam.

We now turn to the carving of the occlusal surface. The amalgam is now at a stage where it gives a crinkly sound on being burnished, and burnishing gives it a polished surface like nickel.

Burnish toward the margins, using a large ball instrument first. Using successively smaller ball burnishers, work out roughly the lines, until with an Ash No. 1 plastic instrument (the fine ball end) the grooves are fairly well outlined. Next reverse the instrument and deepen the lines with the small thin blade. Now with a fine pointed instrument (a pair of very fine-pointed scalers, Grafrath No. 6



and 7 are about right), the grooves and sulci can be finished as effectively as can be done in a wax pattern for a gold inlay.

Absolutely the last finishing work to be done on the filling is to obtain proper contact points approximately. By this time the amalgam is quite hard and brittle and a fine strip will remove none of the material. Pass a Gordon White separating saw (it will go through a narrower space than even a floss silk) between the fillings, or between filling and tooth, as the case may be, and then with a very thin linen strip with no grit on it, held taut by winding one end around the beaks of pliers and the other held in the hand, polish between the teeth, making a smooth contact point, but removing no filling material. Bring the strip down to the cervical margin, polish beneath the gum, and the filling is done, unless it is desirable to polish some of the margins at a later sitting. This is seldom necessary or desirable, as the finish obtained by burnishing is most attractive. In extreme restorations, where the matrix is left on until another sitting, the later polishing with discs and strips is a necessity. The occlusal carving in these fillings is done as described before.

Technic for Adjacent Approximal Cavities. Where approximal fillings are inserted, one filling, either mesial or distal, as convenient, must be finished at its approximal contact point (and in this case the wait need not be so long before finishing here) when the matrix is inserted for the remaining filling and this is contoured to meet the contact point planned for the first. Positively two mixes of amalgam should be made and the first filling will be in condition to be carved by the time the second has been inserted. When a number of amalgam fillings are to be made for a patient, practically no time need be lost in waits for carving and finishing as the work may be so arranged that several fillings can be carried on together.

The so-called quick setting alloys take many hours to reach their maximum strength, but two or three hours puts the fillings made with these alloys beyond danger of breakage of cusps or contour, provided proper occlusion has been secured and sufficient allowance made for the movements of the mandible. The greatest danger of breakage is within the first half hour.

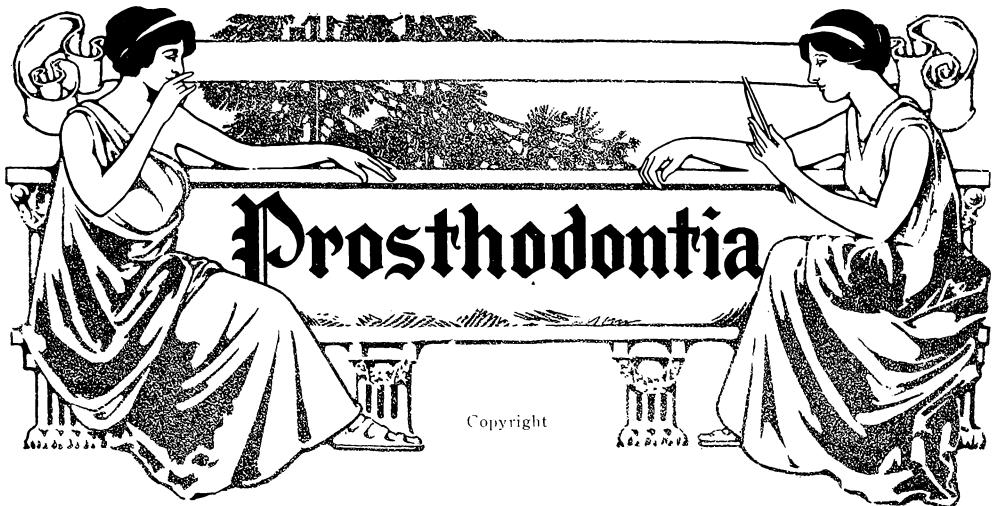
Warnings. A few warnings regarding amalgam work may not be amiss. Do not try to make contours without a matrix and do not try to make too many fillings with one "mix." Do not polish with a disc until several hours after the filling has been inserted, and do not use a cutting strip on the approximal contact points. Do not make the mix so dry that it is crumbly, as it

cannot be contoured, nor made a homogeneous filling under these circumstances. Above all, do not fail to give the same serious attention to detail in amalgam work that you would to a gold inlay, and do not fall short on the foundation work—a proper cavity preparation.

In trying to reproduce natural tooth forms and correct occlusal surfaces, one must know dental anatomy, and have an idea of what constitutes normal occlusion. He must know just where belong the cusps and planes, the grooves and sulci. Surely it is necessary to have an ideal in mind before we try to create mechanically, and I may add, no man of judgment would put fifteen-year-old cusps on a sixty-year-old tooth, nor should he prepare youth for old age by building a flat-worn cusp on the tooth of a child of fifteen.

In closing let me say, that amalgam filling work not only *will* survive, but it *should* survive. It is the "hope" of the fifty million carious teeth in children's mouths to-day, provided we, as dental operators, restore these teeth to the form and efficiency which Nature intended them to have. Are we equal to the task of fifty million gold inlays, and are the children equal to it? I think not. The task looms big enough spelled in amalgam restorations.





An Incident in Practice.

By NORMAN S. ESSIG, D.D.S., Philadelphia, Pa.

It happens to most of us some time during the year's work that we are confronted with a case which is in its details markedly different from others of its kind; in other words, one that differs from the majority of the cases that come to us in practice. Restorations by means of plates, crowns and bridges generally bear a strong similarity to each other, and have a marked sameness as far as our methods of procedure are concerned.

The case I am about to describe is in the mouth of a man of about fifty years of age (Fig. 1), whose upper right central incisor had been devitalized for a number of years, during the last ten of which the writer has had an opportunity to watch the case. The first symptom of uneasiness shown by this tooth was a tendency to move forward out of line, but was not accompanied by inflammation or looseness; simply a progressive movement forward. This was stopped by means of a cleft on the lingual surface anchored in the root of the devitilized central, and bearing upon the left central and the right lateral incisor. Some time after this had been done there was a marked elongation, with the result that the tooth became very loose toward the end of the downward movement. It was subsequently found to have no sac at its root, nor any submarginal tartar; the apical foramen had not been sealed and absorption had gone on to a considerable degree. After prolonged treatment it became necessary to extract the tooth, and here it was apparent as the teeth were large and rather bold in type that a tremendous amount of shrinkage



Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.



Fig. 6.



Fig. 7.

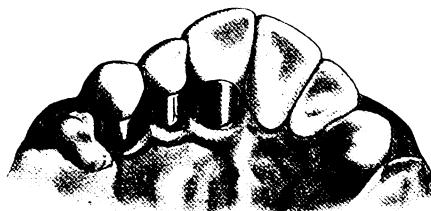


Fig. 8.



Fig. 9.



would take place following the extraction of the central incisor. This would necessitate either a porcelain tooth of such length that it would attract attention, or a sectional gum tooth which, in this case, the writer desired to avoid. He, therefore, determined to replace the root of the central with one made of porcelain, and to attach it to the fixture he had in mind.

The lateral adjoining the central described had been devitilized and filled early in life; the right cuspid although filled, was alive and in good condition. It was, therefore, determined to cut off these teeth (Fig. 2) and place upon each root a Goslee crown with cast base. These were attached to each other, and a Goslee central was selected with the longest cervix possible (Fig. 3). To this porcelain was added, forming a root, which would fit into the socket left by the extraction of the central incisor (Fig. 4). This detail was accomplished by cutting the incisor from the plaster model (Fig. 2), and carving it in anticipation of the extraction of the central root, so that when the crowns were put in place, and the porcelain root inserted into the socket carved in the model, the alignment and articulation was gotten without difficulty (Fig. 5). The recess and cavity made in the porcelain tooth to receive the pin was filled with a cast filling engaging the pin (Figs. 6 and 7), so that it could be soldered to the castings of the cuspid and lateral crowns, and embody the interchangeable feature in the central as well as in the case of the other two. When this was completed the central tooth was extracted, and the finished bridge cemented in place (Fig. 8), the porcelain extending up into the freshly made socket, with the result that not only a vast amount of support was given to a bridge of considerable length, but it enabled the operator to maintain the size and appearance, in his reproduction, of the adjoining central (Fig. 9). It has now been over a year since the completion of this operation, and during that time there has been no noticeable shrinkage in the integument above the porcelain root, the soft tissue, having closed tightly around the porcelain, is firm and healthy in appearance.



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Discussion of Dr. Young's Paper.

Dr. F. W. MacDonald, of this character since Dr. Young has given us such
Detroit, Mich. a detailed description of the fundamentals underlying
the technique of the practical use of this new
appliance. He has given us the benefit of his practical experience, and
I doubt if any of us who has used this appliance can find any weakness
or element of error in what he has brought before us this morning. I
have always held Dr. Young in great esteem, not only for his mechanical
ability, but for his fixity of purpose as well, and I wish to assure you
and to assure him that my esteem has been greatly strengthened by
reason of the presentation of this splendid paper.

I have looked over the paper carefully and from the standpoint of
technique simply, I cannot discover anything that I can take any exception to, or that in the light of my experience I can honestly find fault with. Perhaps this is so because in practice I have followed Dr. Angle
and Dr. Young very carefully in the development of their technique.

However, there are a few matters which may be looked upon in
the light of theory, which I would call your attention to at this time.
One of these relates to the manner in which Dr. Young constructs his
bands. I may as well say that I construct my bands exactly as he does,
although when I first commenced using this appliance, I did differently.
In Dr. Angle's article published in the *Dental Cosmos*, as you are doubtless
aware, we are taught that the bands on the teeth should not be
carried beyond the gingivæ, excepting on the approximal surfaces. In
other words, the band material should not be cut or festooned to allow



the lingual and labial portions to be carried over the lingual and labial surfaces of the teeth under the gingivæ.

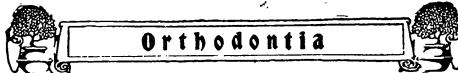
Theoretically I believe Dr. Angle to be right in his contention. The greatest tensile strength of the band, if it may be so characterized, is derived by having the continuity of the band uninterrupted. But when we come down to practice we have another condition to deal with, which from the prophylactic standpoint must be met. To construct the band without festooning, and then to allow the tube to extend beyond the margin of the band is simply exposing the gingival surface of the enamel of the tooth to a condition that is bound to produce an irreparable damage, especially in view of the fact that with this form of appliance treatment is not as frequent as with the old; so that from a practical standpoint we must necessarily compromise, and sacrifice some of the mechanical strength for the sake of promoting a cleaner and more sanitary condition of the surfaces we should be most careful to protect. To the orthodontist who is careful in the production of tension and who has an intelligent conception of what light tension is, there is no danger of carrying the lip or labio-gingival portion of the band away from that surface of the tooth. However, I can readily understand if a very light tension is not used, that a more dangerous and unsanitary condition might be created.

Another point I would like to call attention to and that is in connection with the soldering of the pins. I have used the pin-holder which has been suggested and I find that there is a great danger, if we are not careful, of overheating the pin. When you have the proper facilities to temper your arch and pins after the work is entirely completed the danger is not so great that it has to be reckoned with.

Aside from these points I cannot see that there is anything that I would care to say in regard to any of the points of technique Dr. Young has brought forward. I wish to say, though, before I sit down, that I consider this appliance the most efficient appliance that it is the privilege of the orthodontist to use. I firmly believe it is the only appliance for a man to use who has great ideals and who wishes to approach these ideals to any extent.

I consider it my good fortune to have entered upon the practice of orthodontia at the beginning of this new era, and my advice, especially to one entering upon the practice of this specialty, is to take the time to master the technique of this new appliance, the fundamentals of which we have had presented to us this morning, for in so doing you will broaden your field to the extent that you will achieve results you could not have attained had you not been proficient in this application.

I wish to thank Dr. Young for presenting this paper at this time.



I consider it a sister classic to the one he presented to this society in Boston two years ago.

It seems that Dr. Young has called attention to

Dr. Martin Dewey, some statements which I made yesterday. I was
Kansas City, Mo. very glad to hear the paper because I have never been in favor of this appliance and am opposed to it

now. There is one feature which I have condemned which Dr. Young has eliminated. He has trimmed his bands so that they do not interfere with the approximal contact of the teeth. That is a decided improvement. If you can make the bands narrow enough, so that they do not interfere with the approximal contact of the teeth, you have eliminated one of the objections.

Dr. Young has made the movement of teeth a mechanical proposition. He exercises all force to a limited degree. He says he can measure to a thousandth of an inch and the appliance will move the tooth that much. The sooner we get away from the movement of teeth by figuring or measuring them by the hundredth of an inch, the better our results are going to be.

Dr. Young showed one model where he had the appliance on a deciduous arch. I suppose he put an arch there because there was no space between the deciduous teeth. He had the patient wear the appliance for a number of years and then considered the arch normal. He decided that the appliance developed the arch and that Nature did not. If he had taken the appliance off and had given Nature a chance to develop the arch, the chances are ninety in a hundred that the dental arch would have been normal when it was time for the permanent teeth to erupt.

Because you do not find spaces between the deciduous teeth at six is no proof that they will not be there at six and a half years of age. Individuals develop at different ages. A condition at the age of six may be normal for that individual, and in the next youngster at six and a half a similar condition would be normal for that age. I think we should give Nature a chance to do something in these cases.

In another case he showed models at 14, 16 and 19. If I had to work from 14 up to 19 before getting a result, I would not believe I had a very good appliance. I am convinced from my experiments on lower animals that the development of bone will take place much more rapidly than in five years. It will take place in a few weeks or months, but to get the development of bone, you must have the natural physiologic forces. Therefore, if you use such an appliance as described, you are apt to keep it on too long. You do not give Nature the chance she should have. Dr. Young has been keeping this appliance on a long time



Items of Interest

in certain cases because he was trying to make the movement of teeth and development of bone a mechanical proposition. He called our attention to the fact that in one case the patient was eighteen years of age, where he carried the anterior teeth forward bodily and said he could feel the roots, but no bone had developed between these teeth.

Dr. Young. There was not enough bone.

With the mechanical construction of the "new

Dr. Dewey. appliance" you hold the teeth in one position. If

you hold the teeth with the new appliance you do so in such a way that Nature cannot do anything for the development. Every time the youngster bites there should be the stress of mastication upon the teeth. There is no development around the teeth because the appliance holds the teeth so firm, that the natural forces do not fall on the structures which support the teeth. Therefore, in regulating teeth, and retaining them, your appliance must be constructed in such a way as to permit the natural forces to have a chance to do something. If you hold the teeth rigid (say five or more years), they are very little firmer than they were at first. You must give Nature a chance to do something while your retaining appliance is on. In every one of the cases there was an excessive overbite of the anterior teeth which would make retention difficult. I believe that in the bodily movement of teeth they are liable to elongate. The overbite depends on the length of the cusps. That is true in man and it is likewise true in lower animals. Take the best normal occlusion you can find and the length of the overbite of the anterior teeth is the same as the length of the cusp of the molars, the premolars and canines. Dr. Young is a fine mechanician. He has made the regulating of these teeth a mechanical proposition. Yet he says he cannot move the lower molar back beyond its normal position. You can move a tooth as far as you want to in any direction if you have the right kind of appliance and understand the principles of force. If you move it in any direction you will get development of bone in response to the regulating appliance if the appliance meets the proper force. In private practice or in clinical practice, if I retain a case more than six months, I retain it too long because the development of bone should take place in that length of time, if all the forces of occlusion are normal, and if everything is normal, there is no object in interfering with it, and there is no reason why you should retain a case more than six months.

Dr. Ottolengui. Does that apply to teeth turned in their sockets?

A rotated tooth is harder to retain because you

Dr. Dewey. have to put a band on that tooth, which interferes with the approximal contact and the tooth does not get the



proper stress. By avoiding the use of rigid retentions many difficulties are overcome and six months is generally long enough for a rotated tooth. This new appliance makes the movement of teeth a mechanical proposition. You can move teeth mechanically, but the trouble comes in retaining them, and when you have to retain from 14 to 19, you are not getting the proper development of bone in between the roots. The spiculae of bone will not be laid down in the proper positions until you take the appliance off and give the forces of occlusion a chance to act.

The histologic structure of bone and the physiologic construction of it can only be studied through the microscope and with the X-ray in hundreds of cases. If your regulating appliance is made in such a way that it will correspond with the forces of occlusion there will be fewer failures in retention.

I wish only to discuss the question of bands. I

Dr. Ottolengui. agree with Dr. MacDonald that in connection with this style of appliance it is advisable to have the bands festooned so that the upper margin of the band metal will pass under the gum tissue an equal distance both buccally and approximally. I think that Dr. MacDonald is also correct in stating that it would be hazardous to have the tube extend beyond the margin of the band if the enamel were left uncovered.

But I have found that this style of band is very difficult to make from a flat piece of band ribbon. I have a pair of contouring pliers designed by Dr. Calvin S. Case for making bands for cuspid teeth, and I have found that by crimping the margin of my band metal at the point where it is to reach the labial margin of the gum, the band metal, if properly festooned may have its free ends drawn between the approximal surfaces, and when pinched on the lingual side, the crimped edge of the band is drawn to very accurate contact with the labial surface.

This method of contouring and adapting a band serves another important purpose. It must be remembered that the force exerted by the pin, through the tube, is first felt by the band itself. If this band is so made that it can be stretched, or drawn away from the surface of the tooth, under the influence of stress, we surely may expect disaster. The crimping of the edge of the band, together with the stiffening of the band by soldering the ends at the lingual side, plus the stiffness received from the presence of the tube on the buccal surface should provide us with an almost rigid attachment to the tooth.

**Dr. Carl B. Case,
Milwaukee.** Until I saw the final models shown by Dr. Young, I was strongly inclined to take the view that this appliance was a very inefficient one and I was fully prepared to say so, but I must acknowl-

edge, gentlemen, that the results which I have seen were quite a revelation to me, because I did not believe one could accomplish anything of that kind with such an appliance. But even now, in the face of the evidence offered, I cannot recognize its efficiency. In the first place, because of the extreme accuracy required in assembling it; in the second place, because of the skill required to fit it perfectly or accurately to the teeth; and in the third place, because of the extreme difficulty of adjusting or operating it, to say nothing of the skill and care demanded.

From first to last, the apparatus is the most difficult one to manipulate, which I have ever seen. The inclination and paralleling of the pin-tubes on the anterior bands, the similar inclination and paralleling of the pins on the power or spring bow; the insertion of the pins into their respective tubes simultaneously or nearly so; and last, but by no means least, the removal of the bow and its pins from their tubes for readjustment to increase the spring tension and the reinsertion of the bow with its pins into their respective tubes are obstacles sufficient to render the apparatus inefficient, regardless of the results which it may be capable of accomplishing.

Who can estimate the amount of spring force required to move teeth bodily and who can readily control that force? In the instance of causing one or more of the teeth to become intensely sore or lame think of the skill and time required to readjust the apparatus so that the one tooth will be relieved of the pressure without impairing the utility of the appliance.

What would Dr. Young do in such an instance which should be of common occurrence?

One other thing in connection with the working of the apparatus I should like explained; it has seemed to me that the movement of the central incisors must be greater than that of the other teeth on account of the greater length of spring leverage.

I would like to answer Dr. Case now for fear

Dr. Young. I might forget what he has said. I spoke of carrying

the four incisors forward. By putting a bend in the base wire you would bring the roots of the central incisors forward faster than the laterals. But that is not all I do. In order to bring the lateral roots out as fast as I bring the centrals, I catch the base wire with two pairs of wire-bending pliers and bend the wire, so that I can bring the lateral roots out as fast as the centrals.

I would like as many of you as possible to attend my clinic to-morrow, as that will answer most of the questions better than I can answer them here.



Three years ago this apparatus, I believe, was introduced under the title of "Bone Growing," and that was practically the first general recognition of the bodily movement of teeth, although bodily movement of teeth was accomplished successfully with an apparatus in 1892. This was practically twenty-two years ago. I am not going to describe or demonstrate this appliance to you. You may have seen it.

Dr. Young. I have made it.

Dr. Case. In the original models (showing casts) these teeth are seen to be so irregular that all were placed in line before that apparatus was put on. You do the same thing with the spring arch before you put your appliance on?

Dr. Young. I put the appliance on in the beginning of the treatment.

Dr. Case. There are some cases in which we find it necessary to use an aligning appliance where the teeth are decidedly irregular and it is necessary to put them into line.

Dr. Young. I know it.

Dr. Case. This contour apparatus (exhibiting apparatus and casts) is the original one used on this particular case in 1895. It shows how the alveolar ridge has been decreased in size. The accompanying cast shows the position of the teeth when the retainer was originally put on.

I pass that around to show the original contour appliance which was introduced for the bodily movement of the anterior teeth twenty years ago. This one (exhibiting second appliance) is of more recent date. Probably during the last three or four years, the appliance has been perfected. You may say that the appliance is considerably heavier than yours. You may say it would cause considerable inconvenience to a patient, but as a matter of fact it does not. There is no part of this appliance which is rough, and no matter what my patients may think in the beginning, they have told me they suffer very little inconvenience from that appliance after they had it on for a couple of weeks, or not any more inconvenience than would result from any other apparatus. It is also a decided improvement over the original apparatus that was used.

I want to speak of the superiority of this appliance, which is operated by screw force, over Dr. Young's or Dr. Angle's. The fact that you have to depend upon spring force does not permit of the generally recognized required period of rest.



Dr. Young. What do you mean by that?

Dr. Case. It has been recognized that, as a rule, the apparatus should be tightened once or twice a week, producing just a sufficient amount of force upon the teeth to cause movement and then a prolonged period of rest of three to seven days for the tissues to recuperate. You do not get continuous cell activity all the time. Therefore, you are not as apt to get inflammation of the tissue.

Dr. Ottolengui. That is not a generally recognized fact.

Dr. Case. I believe it is.

Dr. Ottolengui. I do not.

Dr. Case. There is one other thing I want to speak of, and that is the distal and mesial movement of buccal teeth. The distal or mesial movement of buccal teeth can be accomplished just as readily with the proper kind of apparatus as can be the movement of anterior teeth. That was not recognized until a few years ago. Dr. Young has denied the distal movement of molars.

Dr. Young. Under certain conditions. To make myself clear, I am willing to admit that molar teeth may drift forward mesially of their normal position. If they are forward of their normal position, I believe that they can be carried bodily distally. On the other hand, if they are not forward of their normal position in the skull, I do not believe they can be carried bodily distally, but they can always be carried mesially.

Dr. Case. One other point, and that is in regard to the working retainer. That working retainer was used for the purpose of holding the roots of the teeth bodily forward by the exertion of spring force. It later was given greater scope and moved the teeth bodily. The appliance was originated for the same purpose that my retaining apparatus was originated, *i. e.*, for the purpose of retaining the teeth bodily. But yours operates by exerting force, while mine operates by resisting the reactive forces. When it has a solid grasp on the tooth it is held firm. The relation of one tooth to another in a firm position cannot be changed and the bodily movement is maintained. There is no force at all being applied to the teeth except that which is intended to hold the teeth in position, which it does.

**Dr. C. H. Hawley,
Washington, D. C.** I want to call attention to the great accuracy which Dr. Young has developed in constructing these new appliances and as I listened to his paper, I wondered at the accuracy of his technic. Usually, it is



the tendency of the human mind to depart from the strict teaching received and attempt to find something better, something original, but I would advise in commencing the use of this appliance, to adhere closely to the technic given.

In regard to the question of incisal bands; while there is a difference of opinion as to whether it should reach the gingival line in the incisal region or whether it should be pinched from the under side and not reach it, in either case these teeth are kept immeasurably cleaner than they are under the ordinary arch. In some cases where there are deep festoons and the bands do not reach the gingival line, after this appliance is adjusted, they are so firm and there is so little danger of loosening that the patient will keep them clean and there is less danger of injury to the soft tissue than with the ordinary expansion arch.

I have adjusted a large number of these appliances in the last four or five months. Some of these cases, eight or ten of them, were cases of young children for whom I am beginning treatment. As an instance of their advantage, I might mention a little boy nine years of age. He is typical of a class that many of us have. A perfectly healthy boy, and one that has been raised with the idea that almost anything that is done to him that makes him uncomfortable, is fundamentally wrong. If you scold him very much you are apt to have trouble. I had my assistant stand by the chair, ready to check every movement in order to keep the boy in it. He was a good-natured boy. After tormenting me to death so that I came near throwing him out of the window, he would get up from the chair, make the politest bow and say, "Good-bye, Doctor." (Laughter.) But after I got this appliance on, I never had any more satisfaction in my life than to see him come back once every two or three weeks with everything in position. If I had used ligatures in his case, he doubtless would have returned each time with most of them untied and if he could possibly have worked the appliance loose, he would have done that. I began to make a certain movement by a bend in the arch and when the boy would come back at the end of the time specified, I would get that movement accurately. My success in such cases from the use of this appliance has been very gratifying.

There is a point that Dr. Young mentioned that I would like to emphasize. You can move teeth just as fast or faster than with ligatures and the ordinary expansion arch, but that is not the point. You can move them as fast as you want to and do not need go any faster. You do not need to go faster than you ought to go. It is under absolute control.

I would also emphasize the point and impress upon you the importance of what the author of this paper has said with regard to paying



attention to details. The work he has described is very fine work indeed. I do not think we have ever adjusted an appliance that required as delicate work as this does.

In regard to some of the points referred to by Dr. Dewey, I cannot resist the temptation of discussing them briefly. He speaks of the normal development of a child's denture, and tells us that we interfere too much, and that if we leave it alone we will have normal development. Gentlemen, I have watched cases for a good many years, and I have models of children's mouths that have come back to me at two, three and four year intervals. I have watched carefully for Nature to do something, without interference and I must say that I am discouraged. I do not see how we are going to get movement of teeth unless we get it mechanically, and the more accurate that mechanical work is, the better.

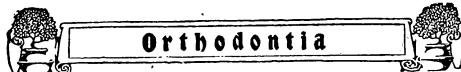
I would not want to take Dr. Dewey's statement in regard to this matter unless he has models of children's mouths to show me that they have moved in the normal way after intervals of three or four years. I have not seen such models.

I have not seen a normal development of a child's denture under the present conditions of living. I have seen a good many that have no such development and I do not want to accept a mere statement that there is such development, until I see the models.

Dr. Ottolengui. You mean to say that there is no such normal development?

Dr. Hawley. Not by any means, but in the ordinary child we do not see it. There may be some such children, but I have not observed them in my practice. If there is an appliance by which Dr. Dewey can treat teeth, retain them for six months and then take off the appliance and have the teeth stay in position, it is something he has kept quiet and has not said anything to us about, because our experience is that once treated, the teeth will not stay in place without longer retention. There is not the rigidity about this new appliance that Dr. Dewey seems to think there is. The bands are not in rigid connection. The teeth are held with a tube and pin and some movement of the teeth is permitted. There is some natural movement that will prevent the bands from becoming loose. They are not so apt to become uncemented as you think because they are not collectively rigidly held.

Dr. Young has stated the difficulties of the appliance better than I can and more accurately. The main thing that I wish to speak of is the matter of experience with this appliance in my hands. I have obtained very gratifying results with it and can see a promise of great relief from many of the anxieties of my former work.



While Dr. Young was reading his paper I inter-

**Dr. B. E. Fischer,
St. Louis.** rupted him by asking the question: How would you treat a tooth that has only partially erupted? and

he replied he would leave it alone until it was long enough. Now, I wish here to recall the distinction Körbitz, of Berlin, makes when he says that a tooth may be absolutely too short, or, relatively too short. In other words, a tooth that has only partially erupted is absolutely too short; a tooth that has fully erupted and is still too short because it fails to come into occlusion is said to be relatively too short. I think it a fine distinction and I would now like to ask Dr. Young how one can elongate upper lateral incisors that are relatively too short, with this new appliance.

I want to make an explanation as there was

Dr. Martin Dewey. some misinterpretation of what I previously said. I said it is never necessary to retain a case more than six months, if you have the normal forces of occlusion operating. But if you do not have the forces of occlusion operating you might have to retain the teeth for a lifetime. That is my proposition.

It is a question of whether deformity is second-

Dr. Federspiel. ary or primary, and if you remove the primary cause early enough, the secondary condition is not fixed, and I am satisfied the child will go on developing normally. If the secondary condition becomes fixed and the primary cause is not removed, that is another question.

I would like to ask Dr. Dewey what he means

Dr. Hawley. by the forces of normal occlusion. Does he mean that in case you see a perfectly corrected malocclusion, the teeth must be in absolutely correct occlusion, with the buccal cusps in absolute contact. Ideally we may correct a case with that condition in view, but practically there have been very few cases shown where we have absolutely ideal occlusion.

I would like to ask Dr. Dewey a question. I

Dr. Ottolengui. am very much in accord with his views, but it is not clear to me what he just said. If you fail to obtain the normal force of occlusion, you have to retain the teeth a lifetime. Did he not mean until we do get the normal forces of occlusion?

If the normal forces of occlusion are not established we must retain the teeth a lifetime or until they are established.

That applies to almost any case. I have been getting satisfactory results in the last two or three years by removing my retention from one jaw first,

allowing that to be unrestrained, while the other was retained, and then after the bone growth and gradual fixation of the teeth of that particular jaw, it will be safer to remove the retention from the other.

Dr. Eischer. Regarding the point relative to the length of time required to secure permanent maintenance of the newly established relations, Körbitz recommends removal of the post-treatment appliances in parts, and that the lower incisors and cuspids be held longer than other parts of either arch. He maintains that they are a powerful factor in shaping the form of the entire denture and I quite agree with him.

Dr. Young. I am very much pleased with the discussion on my paper. I said in the beginning, I believe in short papers, because in that way one is more likely to get his paper discussed, and I dislike to read a paper and not have it discussed. In this instance I have written a long paper and there has been a splendid discussion of it.

I am going to try to answer each man in the order in which he discussed the paper. The first one is Dr. MacDonald. Just a word on that little pin-holder and the fault he finds with it. These pin-holders are so made that the pin will go in too far. If you will pinch the two sides together so that when you force the head of the pin in that it is held firm, you then have $15/100$ of an inch of that delicate $22/1000$ wire between the end of the pin-holder and the point where you are to solder. This prevents the pin-holder from getting hot.

I believe that we should strive to construct appliances so as to exert a constant delicate force, not an intermittent force. And just in proportion as we are able to do this will we be able to move teeth in the most physiological manner. That is why I have advocated to Dr. Angle that a loop should be bent on each side of the middle section of the arch just in front of the square portion that telescopes into the screw section. I do not claim that by means of these loops I get a constant, uniform pressure for a long period, but I do believe that the pressure continues over a much longer period than where the middle section of the arch is left without loops. If we can construct an appliance so that the pressure exerted on all bands attached to the teeth will be constant and uniform for the entire period of active treatment, then I would say it was ideal. We have not such an appliance, nor do I think it possible to construct one.

Dr. Case. I would like to ask what you would do in a case in which you are causing inflammation or soreness of any of the incisor teeth you are moving with that spring force?



Dr. Young.

If you have inflammation or soreness it is because you have used too much force.

Dr. Case.

How do you know what force you are exerting?

My judgment would tell me. I am not advocating the elimination of screw force. I do not believe we will ever eliminate screw force in the movement of teeth; but I say, if we could eliminate it we would be better off.

Dr. Lischer spoke of the elongation of teeth. With this appliance it is the most simple thing to elongate individual teeth. For example, where the laterals are in infra-occlusion as we frequently see them in the upper arch. The middle section of the arch should be so bent that when the pins are soldered to it and the appliance placed in the mouth the pins that enter the tubes on the central incisors and cuspids will pass through so that they lock and those entering the lateral tubes fail to lock. With a suitable instrument the arch wire is sprung upward so that the lateral pins lock one at a time and as there is no slipping the laterals must elongate, owing to the constant pressure exerted.

If you recall, at the meeting in Washington, Dr. Watson gave us a paper in which he spoke of a cuspid to cuspid retainer and leaving it on the last thing.

I have been using these cuspid to cuspid retainers on the lower teeth ever since Watson gave that paper and it is usually the last part of the retaining device to be removed. The objection to this form of retainer is that two teeth are firmly bound together. If we could get some way of retaining this part of the lower dental arch, the normal width without interfering with the normal mobility of the cuspids, we would get a more physiological development of bone in this region.

Dr. Ottolengui spoke of contouring pliers for forming bands. I have used these pliers. You can use them on band material for making bands for the cuspids, laterals, centrals, or lower incisors. I use them all the time. I am glad he brought up this point because by pinching the band material with these pliers you have crimped the edge a little bit and put the metal in shape so that the band is very much more rigid when made than if you pinched the band with the metal flat.

Dr. Case has devised some ingenious pliers. I have a full set of them.

Dr. Hawley spoke about pinching bands on the lingual side leaving the impression that if the bands were pinched on the lingual side they could not reach the gingival line on the labial side. That is not so.



Items of Interest

Generally you do. They can be so left, and Dr.

Dr. Hawley. Angle's instruction was to do that; to pinch them on the lingual side and leave them free from the gingival border of the labial side.

There are some cases where it is not necessary

Dr. Young. to put them up to the gingival line. The farther we get away from the gingival border of the gum with our appliances the better off we are. That is why I think so much of this appliance. We have no ligatures to cause irritation of the gum tissues.

In regard to the remarks of Dr. Dewey about the mechanical movement of teeth, all orthodontic appliances we use are mechanical movers of teeth. I believe that no man has ever lived who can put an appliance in the human mouth and move teeth exactly as Nature will move them. We must do the best we can with our present knowledge. We may know more about it later on, but we must move teeth mechanically if we move them at all.

In regard to the lack of spaces between the deciduous teeth, Dr. Dewey said that ninety per cent. of these deciduous dental arches would develop normally without mechanical stimulation. In answer to this statement I wish to ask one question and let him and every man answer for himself. If in ninety per cent. of these deciduous cases, this normal development takes place, why is it that ninety per cent. of the people in this room have a crowded condition of their lower incisors?

It does not happen in ninety per cent. of all deciduous cases and I doubt if it takes place in two per cent. of the cases of children that live in a civilized way.

The case that was treated from 14 to 19 was first treated by means of the expansion arch and ligatures and the crowns of the teeth put in proper position and then retained with the hope that Nature and the forces of occlusion would stimulate bone development, but instead of this happening the teeth settled back. It was subsequently treated by means of the appliance we have under discussion to-day with the result shown, and I am not ashamed that I took so long with the case. I find that bone develops much more slowly in some cases than in others and I always try to gauge the tooth movement by the way the surrounding tissues develop.

Dr. Dewey thinks that with this form of appliance the teeth are held in a fixed position. That is not so. The teeth are free. I told you in my paper that in carrying the teeth forward, they would go on and rotate beyond the normal if you did not make some provision to prevent it. There is not a fixed thing in the whole appliance. Every tooth has

Orthodontia

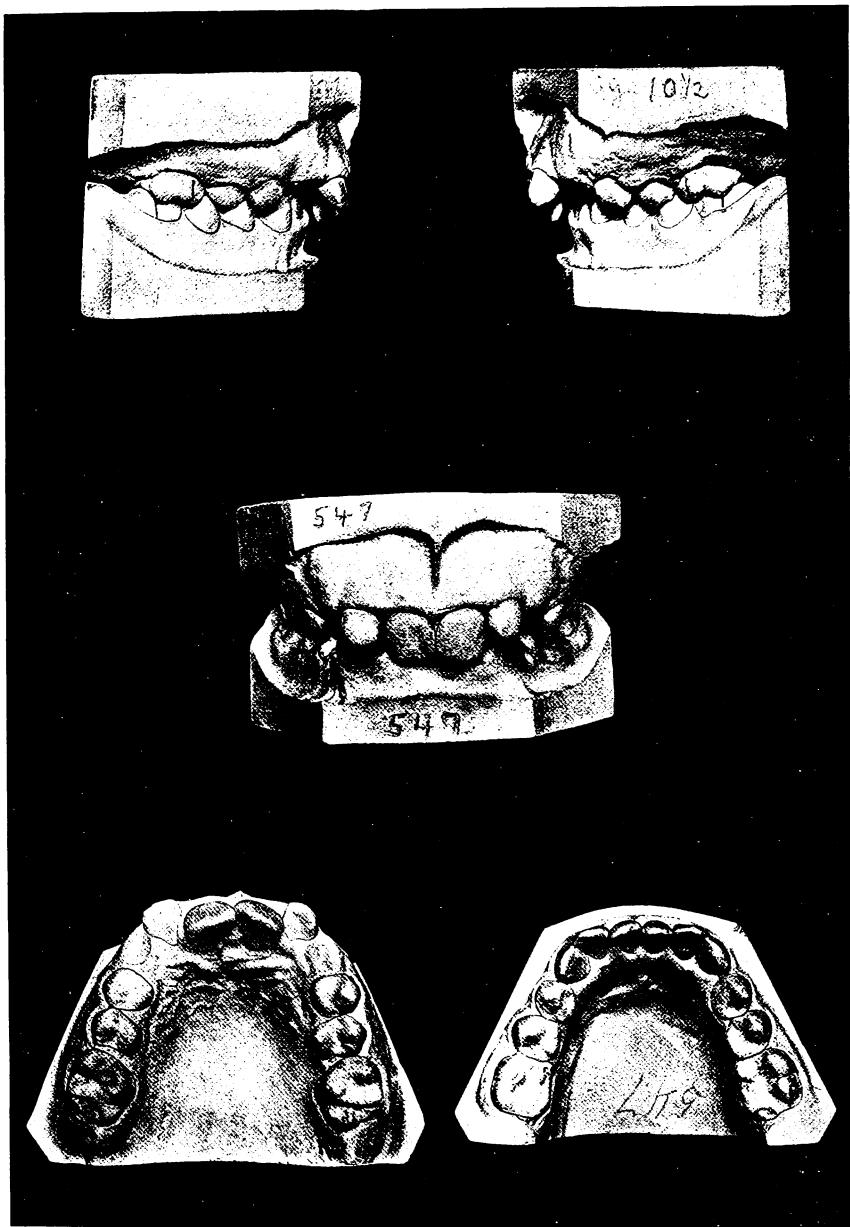


Fig. 84.

Items of Interest

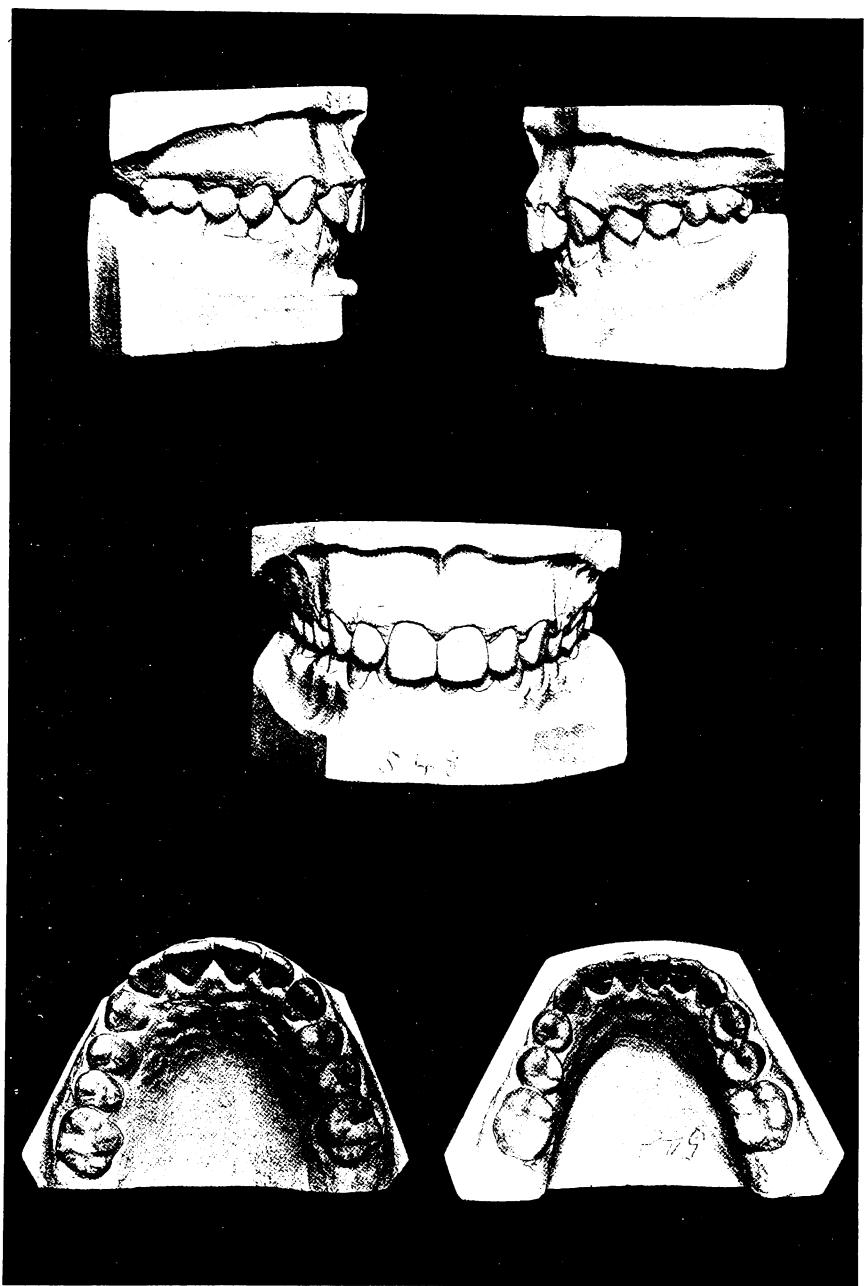


Fig. 35.



some movement. On the other hand, I will admit they have not the same latitude of movement and chance for normal bone development as if there was no appliance on them.

As to the matter of holding the teeth too long. In the case of the

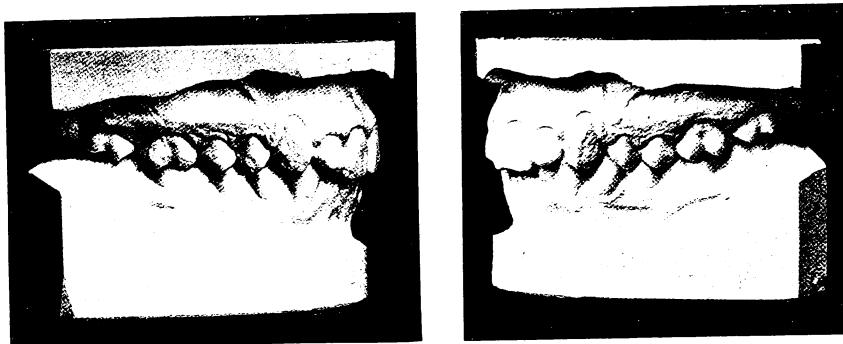


Fig. 36.

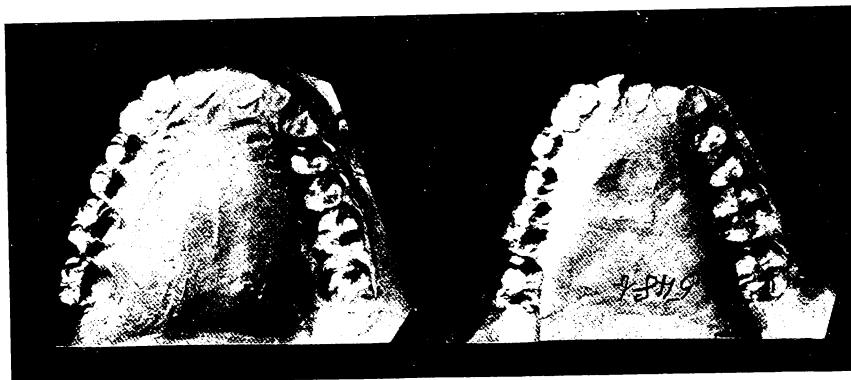


Fig. 37.

boy whom I treated two years (Figs. 26 and 27 of my paper), I was much dissatisfied with the bands on his upper teeth. He was going away for the summer, and I took everything off of his upper teeth. I did it with the distinct understanding that I might in the autumn reapply this appliance. I did not take the appliance off the lower. If Nature takes care of these upper teeth I will be much pleased. These teeth have relapsed some.

I do not think it is possible with any mechanical appliance to put



every tooth where it ought to be. Nature has the final say, no matter how accurately we work.

Dr. Dewey makes the statement that it is never necessary to retain a case more than six months if the normal forces of occlusion are operating, but he fails to tell us how to cause this result to be obtained.

In this connection I wish to show some slides of a case that seems



Fig. 38.

to prove to me, at least, that there is a pernicious tendency for certain teeth to relapse to their former position.

Fig. 34 shows models of the teeth of a child ten and a half years old before any treatment was begun.

Fig. 35 is like view one year later when retention was applied. The upper retainer consisted of a bite plane attached to bands on the upper central incisors with a wire extending back from it into tubes on the lingual surface of the upper molar bands. This retainer was worn for two years. The lower was retained with the lingual arch running from molar to molar in addition to a wire fastened to bands on the lower cuspids. This lower retainer was worn for two and a half years, and during this six months that the upper retainer was removed previous to the removal of the lower, there was no tendency of the upper

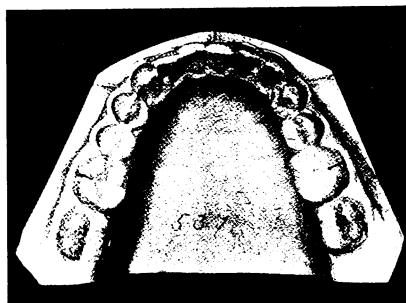
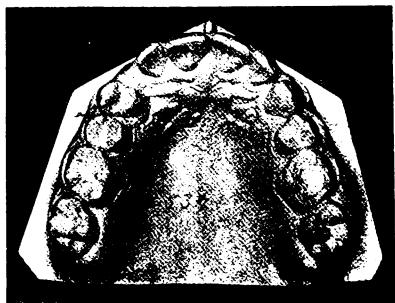
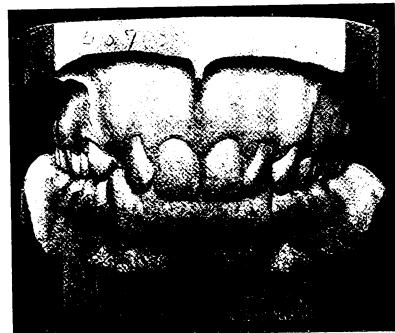
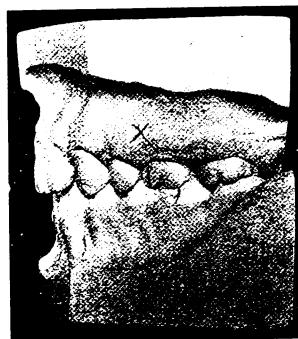
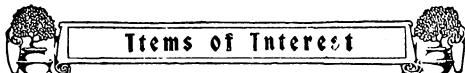


Fig. 39



central incisors to relapse. It was then considered safe to remove the lower retainer and three months later models were made and the result is shown in Figs. 36 and 37. In these, you will observe, that the right upper central has moved lingually sufficient to carry the right lower central and lateral lingually and thus force these teeth more out of alignment than they were originally, as shown in Fig. 34. Now, will Dr. Dewey tell us what we must do to overcome such tooth movement as I have shown in this case? I presume, of course, he will say that the

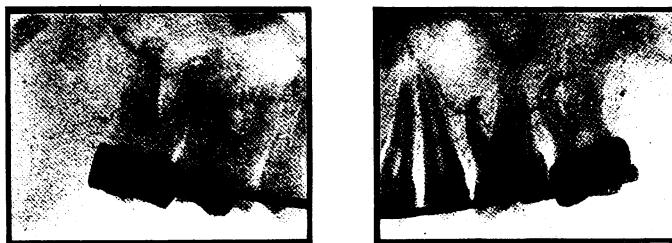


Fig. 40.

bite plane fastened to bands on the upper centrals held these teeth so rigidly that bone development was impossible. I have another case similar to this as far as the position of the upper centrals is concerned, but which was Class I and was retained without any attachment whatever to the upper centrals, and after two years, the upper retainer was removed and the right central has drifted lingually sufficient to cause soreness of the lower incisors. These lower teeth, however, cannot drift lingually, owing to the retaining device still being in place.

Dr. Dewey further states that teeth can be moved in any direction and new bone will form around them if proper force is applied. In reference to this I wish to show a number of slides of a case in which I absolutely failed to move teeth as I wished to do.

Fig. 38 shows profile and front view of the face of a young woman eighteen years of age.

Fig. 39 shows profile, front and occlusal views of models of this case at the beginning of treatment. My diagnosis of this case was that the molars and bicuspids on the right side had drifted forward and that the molars on the left side had also drifted forward and I decided to move these teeth back and thus prove that Dr. Angle was wrong when he contended that the first permanent molars never drifted too far forward. I, therefore, started in by applying force to the upper second molars using the entire lower dental arch as anchorage to force these two teeth back with intermaxillary rubbers. After several months' treatment of this kind

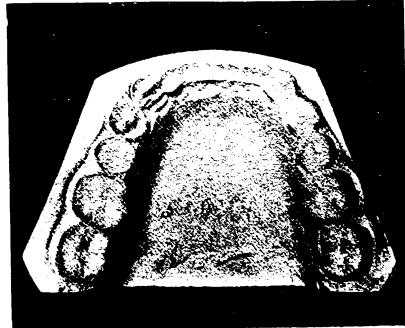
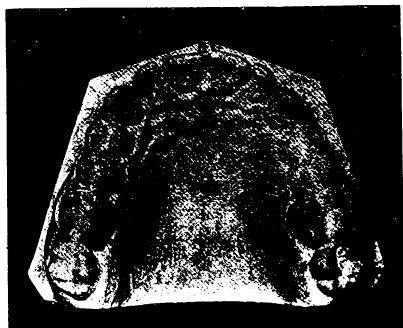
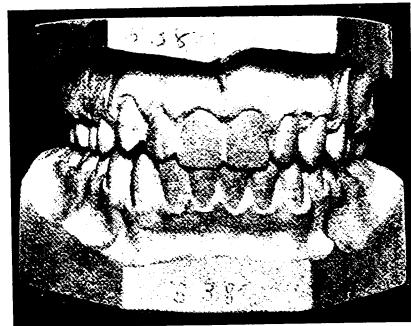
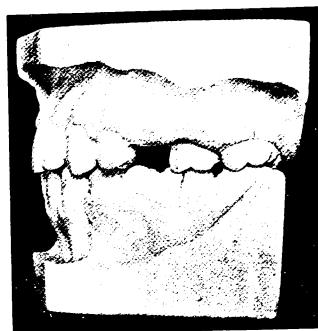
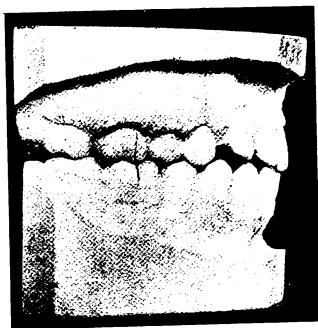


Fig. 41.

Items of Interest

in which the second molars were tipped distally, the appliance was changed so as to apply the force on the first permanent molars and the treatment continued as before. These teeth, however, owing to their better occlusion were found to tip much less than did the second molars, but they would not move distally. The occipital anchorage was then resorted to with the hope of moving these molars as desired, but even



Fig. 42.

with this application of force at night with the intermaxillary rubbers in the daytime, it was found impossible to move the molars bodily back. I then concluded that the unerupted upper third molars were responsible for my failure to move these teeth distally so had X-ray pictures taken as shown in Fig. 40; in these you will observe that there are no third molars present.

About this time Dr. Angle came to my office and I showed him the photographs and models of the case, and his diagnosis was that the upper front teeth should be carried forward so as to make room for the unerupted cuspid on the right side and to provide a space for a second bicuspid on the left side, where the X-ray shows the tooth congenitally absent and then treat as a Class II case. This I proceeded to do, dispensing with the occipital anchorage and intermaxillary rubbers and after three months' treatment the case presented as shown in Fig. 41.

Fig. 42 shows profile and front view of the face at this time and

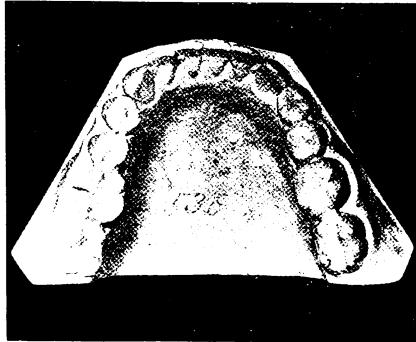
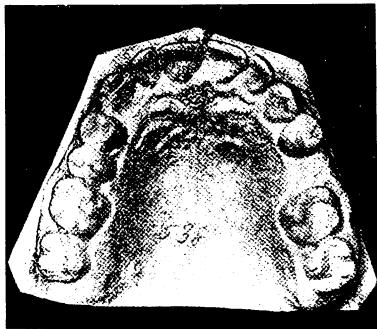
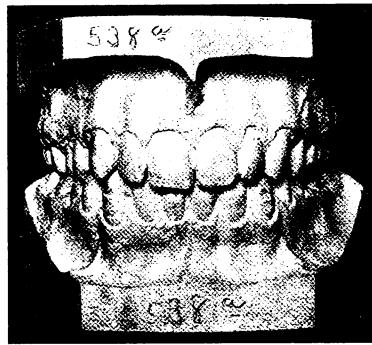
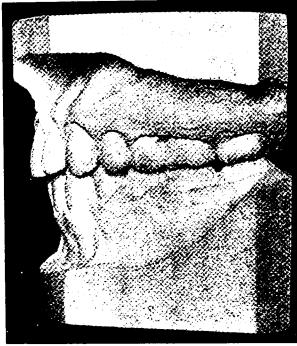


Fig. 43.

Fig. 43 shows the occlusion of the teeth a year and a half after Fig. 41 was made, and Fig. 44 the profile and front view of the face. The mandible moved forward of itself when the upper arch was enlarged sufficiently to accommodate the lower one so that the molar teeth could



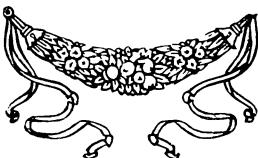
Fig. 44.

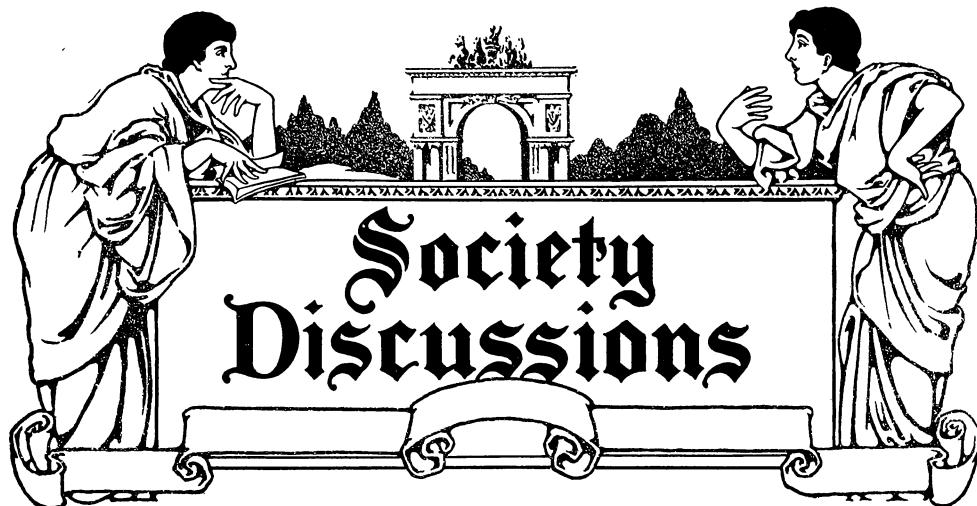
occlude normally and the lower teeth were never retained in this mesial position.

Now, I do not claim that it is never possible to move molar teeth distally, but I am of the opinion that if these teeth are in their normal position that the best we can do is to tip them and not move them bodily distally. I am convinced that where the buccal teeth have drifted mesially that it is quite easy to move them bodily distally as shown in Figs. 28 and 29 of my paper. You will observe, if you study these pictures that the lower molars were distal to normal in relation to the upper ones, or, to be more correct, we should say that the upper molars were mesial to normal in relation to the lower ones in this case. These molars were moved distally without any application of intermaxillary force, and as Dr. Grunberg has shown by means of the symmetroskop, that the majority



of our subdivision cases in Class II and Class III are really cases in which the buccal teeth on one side have drifted forward, and careful examination of the models of a number of treated cases shows that these teeth have moved distally without any effort being made to cause this distal movement.





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Second District Dental Society.

November Meeting.

A regular meeting of the Second District Dental Society, of the State of New York, was held at the Kings County Medical Library Building, 1313 Bedford Avenue, Brooklyn, N. Y., on Monday evening, November 10, 1913.

The paper of the evening was read by Dr. R. Ottolengui, and was entitled: "Some Suggestions for the Improvement of the Dental Law of New York and other States."*

The members of the Legislative Committee
President Lewis. were asked to discuss this paper. Dr. Cooke, of Syracuse, and Dr. Burkhardt, of Batavia, are unable to be here. Dr. William Carr, chairman of the Law Committee of our State Society, will open the discussion.

Discussion of Dr. Ottolengui's Paper.

In Dr. Ottolengui's paper the purposes of dental legislation are just reversed. The only ground upon which courts have sustained such legislation is that it is a protection to the public health. Therefore certain educational qualifications are required as a condition of license;

*This paper was published in the December issue.



Society Discussions

unlicensed practice is made a misdemeanor and provision is made for revoking licenses for unprofessional conduct and gross incompetency.

Apparently Dr. Ottolengui favors a statute pro-

**Post-Graduate
Instruction.** hibiting any person, even a licenciate, from giving post-graduate instruction unless licensed as a teacher.

It is certainly desirable that incompetent men should not undertake to teach what they do not know. But it would seem impracticable and undesirable to forbid one having special knowledge to impart it. The dental law and the education law both forbid the use of the name "college" by persons unauthorized to use it, or the conferment of degrees or licenses except as provided by law. To go further and forbid any instruction to be given except under legislative restrictions is at first blush undesirable, and is at least a matter for careful consideration. The courts have allowed persons shown to be learned in special departments of medical science to testify as experts, although not physicians. Pasteur, the great French pathologist, has been said not to be licensed as a medical practitioner, and therefore not legally entitled to make his own inoculations. I do not vouch for the accuracy of this statement, but it illustrates the point. Every paper read in a dental society purports, at least to be post-graduate instruction. Every such society is, in its scientific aspect, a "study class." It may be that persons undertaking as a matter of business to give post-graduate instruction systematically, continuously and for hire, should be required to give proof of qualification; but it is certainly undesirable to multiply unnecessarily laws in restraint of personal liberty when it is found so difficult to enforce those that we have.

The purpose of creating boards of dental examiners was primarily and chiefly to do away with the "diploma standard" of license, and that result has been measurably achieved.

A purchased diploma is no longer a license to practice, since the holder of the best diploma must pass State examinations.

The proposal to have examiners themselves examined suggests the doubt that the Roman satirist (Juvenal) expressed in his famous question—"Who will watch the sentinels?" and also the practical question, "Who will examine the examiners?" As to the supervision of the medical and dental professions, and the inspection of colleges, are not all these powers now lodged with the Board of Regents and Examiners?

The objection to appointment of examiners from without the societies has been that presumably all competent and licensed and ethical dentists are, or should be, members of the societies.

**Appointment
of Examiners.**



There is no reason why the State should not pay the examiners as well as the clerical force of the Regents, except that to do so will swell the annual expenditures, already excessive, with no assurance that the paid board will do better work than those who serve out of public spirit, and a reasonable assurance that salaried places would be political patronage. It is a question, too, whether men withdrawn from the active practice of their profession are as qualified to examine students as those who are daily confronting the clinical problems that arise. A man may have his brain stored with the knowledge and the theories of books, and yet be hopelessly incompetent as a practitioner or an examiner of practitioners. And in a permanent salaried position, in its nature clerical, he is less apt to keep abreast of the times.

Control of Dental Mechanics. It is not a fact that the present law permits mechanical men to practice, in the sense of doing work in the oral cavity. Whenever such work has been proved to have been done by an unlicensed man, he has been convicted.

The evil referred to would not be remedied, probably it would rather be increased, by calling laboratory men "mechanical assistants," requiring them to register, and expecting their employers to keep track of them. Do the licensed men now keep track of the unlicensed? Do they furnish evidence of their violations of law? In truth, do not many of them permit unlicensed men to work in their offices? Will they be any more likely to report offenses when the laboratory man is given a legal status or a title that he does not have now, whereby the difficulty of prosecuting him will be increased? As to the employer being made responsible for his mechanical assistant, he is now responsible in a civil action for damages sustained by his bad work, and responsible criminally if he aids or abets him in violating the law, provided it can be proved that in practicing he acted in the course of his employment by the principal. To compel mechanical men to register, would render it possible to prosecute them for doing mechanical work without license; but it would not probably deter them from doing operative work any more than the present law.

There is a wide and obvious difference between the pharmacist's apprentice and the mechanical dentist. The former, for the most part, is a clerk in the shop, under the principal's eye, etc. (differences will suggest themselves).

I do not pretend to pass upon the question of the interlacing of operative and mechanical work; but to define the boundaries by statute would be, I think, like defining "fraud," which the courts have never



attempted to do, because to define it is to make a definition of what fraud may be safely committed.

The New York courts having failed to make a working definition of medical practice, announced recently that they would not try to make a hard and fast rule. Still, a definition of dentistry was attempted in the bill proposed last session, which was defeated by the very persons Dr. Ottolengui has in mind: the men with "parlors"; the men who employ mechanics to operate; the men and women who succeed to the business of deceased persons. On the other hand, the bill met no cordial aid from many who professed to desire its remedies. I never saw anything so foolish as the claim that recognition of a dental nurse could not be put into the statute because there is no such person. You can put anything into a statute that you can get through the legislature; with the result that some of the statutes are of a nature to make the angels weep tears of blood.

If it be true that New York has more illegal practitioners than are to be found in all the States combined—an extravagant statement that can be substantiated only by statistics, it must be because

Illegal Practitioners. of the peculiar conditions existing here. Out of the 90,000,000 or more of population, New York has about 10,000,000. No other State has a congested population such as exists on the East Side of New York City, made up of foreigners who immigrate here to sit down in the first port of entry, bringing their own customs and habits and quite out of touch with the spirit of our laws and legal administration. Coming from localities where the barber or blacksmith is often the dentist, they adhere to old habits. The "confiding and deluded" citizens humbugged—if they are humbugged—by these dental practitioners, refuse to report them or testify against them; and when compelled to come to court by subpœna, often testify falsely in behalf of the accused; perjure themselves out of sympathy or less worthy motives. If every practitioner would then report all men practicing illegally, with a statement of his grounds, in fact, for believing that the accused was practicing, then a long step would be taken toward weeding out illegal men.

But experience does not show that this will be done. As it is now, reports of illegal practitioners are rarely made, and when made, they are generally anonymous; if not, they are animated by strong personal motives that prejudice magistrates, and very rarely is the person making the report able or willing to give the name of a single person upon whom the accused has practiced; or give any competent evidence to support his suspicions.

It is true we cannot convict a man of practicing dentistry unless it

can be proved in court that he has practiced. Fortunately, it was enough to satisfy the court if we proved one act of practice and surrounding circumstances. Lately, a Brooklyn dentist, for his own personal reasons, retained a lawyer to prosecute a man, with the result of obtaining a ruling in the Appellate Division that practice consists of a series of acts and cannot be established by proof of one act. It would seem very easy to prove the sale of whiskey, but the courts require that the article sold be proved to have been whiskey. It is to be hoped that the courts will continue to protect personal liberty by requiring that a man shall not be convicted of crime until the crime is proved.

**Dental
Inspectors.**

As to having inspectors go about into all the offices and make their interrogations, that experiment was tried lately by a man who had to be quickly discharged on account of his hectoring performances. Such inspection would be resented, probably, as much by the reader of this paper as by anyone present, and probably by all present.

Moreover, the often puzzling questions of identity and false personation would still remain. The law now requires every practitioner to post his name conspicuously, yet it is very difficult to discover at times who is the man whose name is posted, and whether an unlicensed man is not masquerading under the posted name.

**Definition
of Dentistry.** It has been already noted that the courts have abandoned the attempt to make a hard and fast definition of "medical practice"; for the same reason it is hard to make one of dental practice.

The suggestion of signs is met by the present statute making it a misdemeanor for an unlicensed man to *hold himself out* as a practitioner. And he does not do so by sign, save in rare instances when ignorant of the law.

The attempt to control by statute the use of signs was made, as already said, and failed at the last legislature, the bill being lost through the use of money.

Dr. Ottolengui insists that a statute can be drawn so that evidence could be obtained without the use of "spies"—what else would his "inspectors" be? "That which we call a rose by any name would smell as sweet."

There seems to be an assumption that attorneys employed by the society should personally procure evidence. That is revolting. The other assumption, that detectives employed by a State Board would be less apt to "graft" than those of the society, is gratuitous and not supported by facts.

The prevention of cruelty to children, of cruelty to animals, of vice, etc., is entrusted to societies called "auxiliary governmental agencies," of which the State Dental Society is one.

The prosecuting officers to-day are the District Attorneys, who generally accept the aid of the society's counsel. The suppositions that paid inspectors would not be grafters is not confirmed by experience, any more than experience confirms the theory that other salaried employees of the State will not be grafters.

Now, can any man advance such a theory with the object lesson before him of the Governor of the State impeached for grafting and found guilty as charged by the unanimous vote of the Court of Appeals, and yet be re-elected to office? How can anyone, in view of the late mayoralty campaign, believe that any man who is in an official position can escape the charge of grafting by those who promptly accept every evil rumor as a fact, and believe every man to have his price?

**Revocation
of License.** The man who served his profession by writing the definition of unprofessional conduct into the Michigan law, did no more than incorporate into the statute a definition given by the courts in various States without any statutory definition.

One would suppose that Michigan was under a perfect law and free from medical or dental quacks. Let him visit Mount Clemens. At those springs, the rubbers are no longer instructed as masseurs, because when they are, they set themselves up as medical practitioners, unless I am misinformed.

The fallacy underlying this paper is the very common one, that a statute can free the world from evil, and the more complicated it is, the more likely it is to succeed. Dreams fade in the harsh light of practice.

The framers of the present Income Tax law shared that idea, and the country is groaning in consequence.

It may be well to admit that the present statute is not perfect, to take the ground that a bill cannot be drafted or outlined in general meeting, and to have the resolutions sent to committee.

Dr. Ellison Hillyer. I feel as if the pendulum has swung one way, and then it has swung the other way, and I am a little disposed to take the mid-ground and let it stand still for a few minutes.

It would be almost impossible to take the paper and go over it as Dr. Carr has done without practically covering very nearly the same ground. I am just going to touch upon a few points to make clear the attitude of mind in which I am at present. The committee, of course,

has not met yet. I regret that the members from Batavia and Syracuse are not here, for it has been stated to me this evening that this seems to be rather bringing the question out of its normal place and putting it in an abnormal place before the special committee has met.

That phase of the question had never presented itself to my mind, perhaps because I was not looking at it from that direction; rather from the inside of the committee than the outside. I confess that I feel ready to receive any kind of support or any kind of suggestion that shall remedy the condition which we certainly feel exists here to the detriment of our profession.

I know that every single member of the Second District Society fully appreciates the work that Dr. Carr has done for years, and never does this subject come up but what that sentiment is expressed. The work has been done faithfully and well. There have been criticisms, of course, but it is only a question of method, rather than of motive. I never have heard any other expression in any place or body that I have ever attended, and I have attended a great many.

As far as additional education is concerned, a post-graduate course is practically necessary. The law provides that we must graduate in three years; that is to say, providing a man meet the requirements. We need four years; in some cases we need a great deal more than four years, but if you realize what is demanded of the student who begins as an absolute novice, and that is the way a student is expected to begin, whether he has had previous experience or not, and then have him go through with three years of work, dividing it as it has to be divided, first year theoretical, second year partly technical and partially devoted to the scientific branches, and the third, when the practical part of it has the predominance—it simply is a drive from the hour the student enters until the day he graduates, provided he does his duty; and a great many fall far short of doing their duty, and you cannot make them do it, no matter how you may try.

**Post-Graduate
Teaching.** When it comes to post-graduate teaching, that is a very hard question to deal with. I confess that the step taken by the dental societies, in organizing study clubs for those who have been in practice, and who wish to develop along certain lines has been productive of great good, and will be, if properly carried out. It would be a very difficult matter, indeed, as Dr. Carr has indicated, to find out who should be the examiner of the teacher, or of the examiner, as he stated in his argument. That is a question that, to my mind, would be rather difficult to solve.

Dr. Ottolengui. Are you talking about examining examiners or teachers?



Society Discussions

I was talking about examining teachers—but as

Dr. Hillyer. I say, it matters little how that might be done, so long as it is productive of good. As far as instruc-

tion by men—as Dr. Ottolengui referred to—who have taken up the work of demonstrating trade propositions, trade methods, and so on, it is hard to differentiate between one who is teaching and one who might be merely demonstrating methods; but there are methods and conditions which, as Dr. Ottolengui has said, are certainly very serious propositions; and methods that are being endorsed right and left to-day, and being used by a great many of us to-day which will in a few years be cast aside for other methods, of which we have inklings already.

As far as the State Board is concerned, broad statements were made in regard to them, and I think Dr. Ottolengui made them in the kindest spirit.

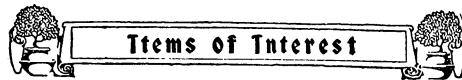
**State Board
of Examiners.** However, one statement I rather regretted, and that was that the Board of Regents was apparently dissatisfied with our present Board of Examiners. I do not think that was exactly the spirit in which that was intended when it was made last year, but a great many of us know that there was a reason back of that, which was purely political, and had nothing to do with the professional side. There was also a statement made that a great many men attend college who cannot graduate. I do not quite understand that; but the statement was made "who cannot graduate."

Dr. Ottolengui. I am willing to change that and say "ought not."

I am perfectly willing to take it either way. A man enters college, matriculates; he attends his first year and his second year, and I have seen men who

have gone through with their three years, to whom it would be a mercy if it were possible to say, "It would be wise for you to quit now; you never will be able to do the work." I have felt that was the case, and have watched them after they got out, and have been surprised at the persistency some have shown; and some have succeeded—not what I would term success upon the surface, but have really succeeded. In other words, it took a longer time for such a man to find himself than some of the others who succeeded perhaps more quickly. And who is going to be able to tell whether a man will succeed in the long run or not?

A statement was made by a member of the society not long ago, that he understood a large percentage of illegal practitioners of New York City, were graduates or students of our college. I cannot quite understand how that is, and I have traced it out as far as I can. I concede that a certain percentage of men fail possibly after their fourth or



fifth examination, but there are not so very many of these, and it is not a very large percentage of any college; and I simply hope that there will come a time when we will be able to say as is planned now, that after the second re-examination a man may never come up again for his examination.

Dental Nurse. You know my position in regard to the dental nurse, which I took two years ago at Albany. I confess that I am not ready yet to change my attitude in that regard. If we could have all of the

changes that are outlined in this paper at once, I should be ready to fight for the resolution to endorse the dental nurse proposition; but as conditions are to-day, I believe that if we allow the dental nurse proposition to enter our law without the other changes outlined by Dr. Ottolengui, we might just as well do away with all our dental laws. Remember, they are not stipulated as female—the dental nurse is male or female; and if that were brought in without the other recommendations, all our illegal practitioners would be "dental nurses." I am heartily in accord with the idea of having the services of dental nurses, and I have been fully understood, I think, in that regard, as far as the office is concerned; but as far as the law is concerned, I believe it would be a great mistake to let that be the entering wedge at this time without the others.

Dr. Carr left out of his discussion one thing I hoped he would put in; that was the dollar annual registration.

Dr. Carr. I am saving that for the committee. There are a number of things I am saving for the committee.

Dr. Billyer: Now, gentlemen, what is the objection to an
Annual Registration, annual registration fee of one dollar for everyone of us? If any man has a better plan for raising funds, I have never heard it. I do not care whether the original proposition came from Dr. Ottolengui or from Kalamazoo; I claim that that provision would mean that we would have a fund of at least \$5,000 a year, which could be appropriated for the sole use of prosecuting these illegal practitioners. If for no other reason, I would say that annual registration is desirable. As far as the registration is concerned, I think the arguments made in the paper in favor of it are perfectly sound. We do need to know who are practicing—at least who have the right to practice.

Censorship of Dental Advertisement. As far as the censorship of dental advertising is concerned, that is a matter I have never particularly thought of. I have never had any great quarrels with the man who has advertised, probably because that is the least of all the evils, if the other evils could be cured.



I regret if the reading of this paper seems inopportune to some. I think it was brought here in perfectly good faith, and with the idea of getting the opinions of those whom we are supposed to represent. The committee, when it goes into session, is not supposed to present its own opinions, but should voice the opinions of the men who are supposed to be back of it.

As to the Regents' licenses for post-graduate teachers, I should question the advisability of that at this time very seriously.

I want to express my unqualified approval of
Dr. Barker. the proposed amendment which provides for annual registration, for the very reason mentioned by Dr.

Hillyer—it provides a fund or capital with which the State Society can do business. It is not any exaggeration, and I have no fear, of Dr. Carr contradicting me, when I say that the work of the Law Committee of the State Society has been hindered and handicapped and to some extent checked in the past thirty years by the lack of funds. The State Society has never capitalized its Law Committee. The Law Committee has had to depend upon an income which was irregular in coming and uncertain in amount, and oftentimes failed to come at all when it was most needed. Last fall we had a very hot time here one evening in regard to raising money to carry on that very work, and we were treated to the humiliating spectacle of our Law Committee passing around a hat and taking up a collection for the purpose of raising money to carry on their work. I am in favor of any proposition which will obviate any such unbusinesslike method of doing business.

There is one phase, however, of this matter of annual registration, which I want to call to the attention of the committee, because we men in the city do not come in contact with that phase. I refer to the loss and inconvenience which country dentists may be subject to in that annual registration. The mere annual fee is a small matter; but a man who lives a long distance from his county seat often has to hire a conveyance and drive ten, fifteen or twenty miles to register, and the loss of time and the expenditure are considerable.

For instance, we have several members practicing in the town of Peekskill. The county seat is at White Plains, on a different railroad, so that he has to take a train to New York, and then take another train from there to White Plains. It is an all-day job.

Dr. Ottolengui. The annual registration would be by mail, on blanks furnished by the proper officer.

Dr. Ottolengui has brought out a great many new points, but there was one in particular that struck me as being a little too drastic, and that is in



regard to the licensing of teachers. A few years ago, a man who has done a great deal for dentistry as well as for organized orthodontia, wanted to have his post-graduate school in New York City, and there was so much opposition to it that if there had been any such law as this it would have been practically impossible for him to hold a session here or anywhere else.

This subject is of the greatest importance not only to the general public, but to the proper standing which our profession shall maintain in the estimate of the public and of all other professions.

I agree with the essayist in what he says regarding the Board of Examiners, but I do not agree that the Board of Regents should be given the power to appoint upon the Board of Examiners whomsoever they may wish. I do, however, believe it would be desirable in these days, that examinations be held so that men with necessary qualifications should serve upon this Board. I would be willing to leave the selection of such men to the Board of Regents provided that they were restricted in their selection to members of the New York State Dental Society. My argument for this is, that all ethical members of our profession are eligible to membership in our State Society, and there must be good and sufficient reasons why any men practicing dentistry in this State have not become members of our society.

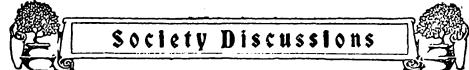
I do not like the idea of using the name "mechanical dentist." The name dentist should be used as much as possible in a higher sense and have attached to it more dignity. The work being done in our public educational campaign is adding more dignity to our profession, and the name "dentist" is too closely related with our personal services to have it associated with any form of work that is not personally related to the patient.

A "dental mechanic"** would be better. It would be just as logical to speak of mechanical surgeons, meaning those who make surgical appliances that are to be worn by the patient. I hope that a better name may be thought of or be created than the one used.

I trust that when the registry is made, that it will be arranged not only alphabetically, but geographically as well, so that we may glance at once to those streets in our neighborhood to see if those practicing there are registered.

There is no question in my mind that a law requiring annual registration such as the essayist speaks of would do more to abolish the

*Dr. Hyatt's suggestion was so good that before publication of the paper the term dental mechanic was substituted for mechanical dentist.—R. OTTOLENGUI.



Society Discussions

possibilities of graft than any plan that has been suggested up to the present.

It seems to me that not only is it desirable to more clearly define "unprofessional conduct," but also to define in a legal way what shall be the necessary qualifications for a specialist.

We certainly are to be congratulated upon having the opportunity to hear the ideas of one who has been interested in this subject and who has the happy faculty of not only thinking clearly, but of expressing his thoughts clearly.

The paper is one that should be read and discussed in every District Society of this State and I shall move later that copies of the paper and the discussions, and result of action upon the resolutions, be sent to every District Society with the request that they also take action. Also that attention be called to the fact that within the First and Second Districts the greatest number of illegal practitioners are found, and that these Districts need the help of every other District in the framing and forming of such laws as will enable them to put an end to this state of affairs.

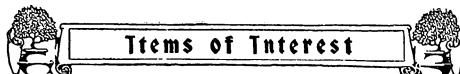
There is one thing Dr. Ottolengui did not in-

Dr. Johnson. clude in his paper; it is a crime to make burglar tools and allow them to be sold as such, and it should be a crime for dental manufacturing companies and supply houses to sell to illegal practitioners. I think that would cripple them to some extent.

Dr. Ottolengui. That is something I was saving for the committee. (Laughter.)

**Dr. M. L. Rhein,
New York.** I trust that although not a member of your society, you will pardon my interjecting a word on this subject. It was refreshing to me to listen to

Dr. Hyatt, because I believe we all sympathize with him. I think he voices the general sentiment of the large majority of dentists, that the present conditions are unendurable. I was surprised at Dr. Hillyer's view on this dental nurse question. It seems to me that the time has certainly arrived for serious consideration of this topic. I have been waiting for it for over thirty years. The value of hygienic conditions surpasses everything that we as dentists have to offer the public. It surpasses everything that the orthodontist has—every constructive work. Everything there is in dentistry occupies a place beneath a demand for oral cleanliness, and it has been pretty well demonstrated that the dental nurse is the only medium by which this blessing of dentistry can be given to the public. If what I have said is true, then it



should make no difference if it filled the country with illegal practitioners.

In the State of Massachusetts, in fighting this measure, they make the ridiculous assertion that there are dentists to do this work, when there does not begin to be dentists enough to take care of the needs of diseased teeth—who, then, is there to teach the child how to prevent diseases of the mouth and how to keep the mouth clean?

It appears to me to be a most obsolete argument to say that the dental nurse will be a step toward the illegal practitioner. I have a dental nurse, and I defy the law committee and everyone else to prevent that dental nurse from exercising her duties—and anyone who has followed the use of the dental nurse will recognize the impossibility of its breeding illegal practice of dentistry.

I am sorry that Dr. Burkhart is not here to-night, because his name on the programme, to a certain extent, induced me to come here, and it was in reference to this subject of the dental examiners. If there is a weak point in our law, it is the method by which our dental examiners are appointed. It is the weakest point in the whole dental law, that which requires one examiner from each judicial district. This makes it possible that the appointment may be political pap, handed out to some man favored in his own particular district. Is this the way for a scientific body of men to have the dental law enforced? Someone has said the Regents are not dissatisfied. I tell you the Regents are very much dissatisfied. I say that from personal intercourse with the Regents on this subject.

The idea of the Board of Regents in regard to the dental examiners is not that the Board should be paid, as a Board, but as the essayist has suggested—one particular man on that Board, perhaps the secretary, should be paid a proper salary. He should be a man competent in every respect, not only theoretically, but practically—a man who should visit a dental college or a dental school, or a clinic.

The point seems to have been made that the
Dr. F. C. Walker. present Board of Dental Examiners has been foisted on the Regents. Every dental examiner has been appointed as a choice between two men. No one man can be nominated; two names must always go together, and the Regents choose one. The chances are that one would be better than the other. If they were not satisfied with the present Board, the Regents could change it.

I did not intend to take the floor again, after having said all I did. I was perfectly in earnest when I said that I am in sympathy personally with the idea
Dr. Hillyer.



as propounded by the most competent endorser of the dental nurse proposition, but I still adhere to the statement that in New York City, and this is the hotbed of our difficulties, if we have the dental nurse proposition legalized without the other changes in the law proposed by the essayist, and I am ready to endorse all of them, it would open up the way so that there would be nothing but dental nurses. The true nurse, such as Dr. Rhein is talking about, and the one I am speaking of, are two entirely different persons.

There is not a man in this room who could not have a dental nurse at his chair, exactly as Dr. Rhein has, and probably not offend the law any more than a man who stands on a street corner and converses with his neighbor, which, technically, is against the law.

I refrained from getting up before, because I

Dr. Wright. did not want to have my remarks seem at all personal. However, I really feel it a duty to say what I have in mind. Dr. Hillyer, a few moments ago, said that many criticisms are made, but nobody offers a remedy. I think that has been the trouble largely with the dental law, that lots of criticisms have been made.

I was a little surprised when Dr. Carr read his discussion, that he was not wholly in sympathy with these recommendations which have been made by Dr. Ottolengui. I do not want Dr. Carr to feel that I am criticising him, because I respect Dr. Carr too much, and I am under the impression that Dr. Carr thinks that everybody has been attacking him as the head of the Law Committee. I think Dr. Carr has taken discussions of the present state of affairs a little personally. I am sorry if he feels that way, but there has not been any recommendation that I have heard that has been any improvement over this recommendation which Dr. Ottolengui has presented. If there is not any better, let us vote for this. If there is, let us drop this one and vote for the better.

Speaking of remuneration of examiners, Dr.

Dr. Ottolengui. Carr said that to pay the examiners would be to increase the State's expenses with no certainty that the paid Board would be better than a volunteer board. This is true in once sense, but lawyers and medical men do not work for the State free in order to keep down the State's expenses. Why, then, should the dentists? He also said that an examiner who withdraws from practice would not be so competent as men in practice. This also is true, but I do not recall suggesting that the examiners should be restricted from practicing. Their active services are needed only periodically, but when



needed they should be paid for: though I do believe that there should be a Board secretary who should devote all of his time to the work outlined in my suggested law.

Speaking of dental mechanics, Dr. Carr said that nothing would be gained by compelling them to register, and that it would not deter them from doing operative work. Dr. Carr misses my contention entirely. Under the present state of things, when an unregistered man is accused he sometimes evades the accusation with the assertion that he is only a mechanical dentist, and the duty of disproving this statement falls on the prosecuting officer. But if the dental mechanic were also compelled to register, then the question would not be, "Why are you practicing dentistry," but "Why are you not registered," and the duty of proving his status would fall on the defendant. My proposition deprives the unregistered man of one subterfuge, and at the same time swells the fund for prosecuting, by increasing the number who must pay registration fees. It also gives to the State a wider surveillance over all who practice dentistry in any form.

Dr. Carr says it would be difficult to delimit the sphere of mechanical dentistry. This is a woful begging of the question. The present law permits the practice of mechanical dentistry without requiring registration and license. If the State can permit the doing of a thing without a license, it surely can permit the same act to those who may be required to take out a license. In the bill advocated by Dr. Carr last year he tells us truly that there was an attempt to formulate a definition of dentistry; I will undertake to formulate just as good a definition of mechanical dentistry.

Just a word about inspectors. Dr. Carr said there would be no difference between inspectors and spies such as we have now. I think there would be a great deal of difference between a person who comes in and says: "I am an inspector; I am the man authorized to ask you why are you not registered," and a man who goes into an office and says, "Do you fill teeth? Will you fill my teeth?" and who then goes on the stand and testifies.

Now just a word about the dental nurse. I think Dr. Rhein is looking down on this from an aeroplane, and Dr. Hillyer is looking up. The facts are not as Dr. Rhein has stated; the facts are as Dr. Hillyer states them. The question of permitting dental nurses can only be considered in conjunction with my other recommendations. I want registration of everybody; the prophylactic assistant, the mechanical assistant every time he moves, the dentist himself and the dental mechanic.

Dr. Hyatt objected to the term "mechanical dentist." I gladly

accept his suggestion and will adopt his term "dental mechanic" and restrict the word dentist to mean a regular practitioner. But all these people should be registered.

Dr. Johnson suggested that dental supply houses should be prohibited from selling dental goods to illegal practitioners, and recites the fact that it is a crime to make and sell tools to burglars. This is not analogous. It is against the law to make or sell burglar's tools, but it is not against the law to sell tools to burglars, because the tradesman cannot know that his customer is a burglar. In like manner we might prohibit dealers from selling dental goods to illegal dentists, but then we must furnish the dealer with some means of knowing that the customer is an illegal dentist. I feel certain that if the State will compel annual registration, and then prohibit the selling of dental goods to unregistered men, the reputable dealers would willingly comply with such a law. Therefore I think Dr. Johnson's proposition well worth considering. Having served as our law committee member he certainly knows something of the situation and he must think it serious to warrant such a drastic act. On the other hand, I have serious doubts of the constitutionality of such an act which would be in restraint of trade. Moreover, I believe we should do our own house cleaning and not ask commercial men to do it for us.

The discussion on the resolutions proposed at the end of Dr. Ottolengui's paper was postponed because of the lateness of the hour, and made a special order for the next meeting.

At the December meeting of the society the resolutions introduced by Dr. Ottolengui at the end of his paper were considered and after animated and lengthy discussion, resulted as follows:

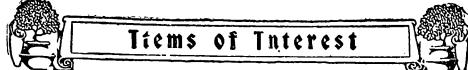
"Resolved that the society approves of the plan for annual registration of general practitioners of dentistry." Adopted.

"Resolved that the society approves of the plan of registration of mechanical assistants, and of licensing and registration of dental mechanics." Adopted.

"Resolved that the society approves of the plan for prophylactic assistants." Rejected.

"Resolved that the society approves of the plan for revocation of licenses." Adopted.

"Resolved that the society approves of the plan for Regents licenses for post-graduate teachers." Rejected



New Jersey State Dental Society. Evening Session, Thursday, July 17, 1913, 8 P.M.

We will now take up the applications for membership and I will ask the Chairman of the Membership Committee, Dr. Kussy, to make his report. (Dr. Kussy read the names of the applications for membership, but at the suggestion of President Thompson action was deferred until the last session of the convention—see proceedings of last day.)

Dr. Kussy. Mr. President, I move that these applications be referred back to the committee for their approval and that they be acted upon to-morrow morning.

(Motion carried.)

The next business in order is discussion on the paper read by Dr. A. E. Smith, Cleveland, this morning on the subject: "*Scientific Administration of Nitrous Oxid-Oxygen*."* This discussion was postponed at the session this morning owing to the lateness of the hour. We have a great deal of business to transact to-night so that I will have to ask those gentlemen who discuss the paper to be as brief as possible in their remarks.

*Dr. Smith's paper appeared in the December number of ITEMS OF INTEREST.

Discussion of Dr. A. E. Smith's Paper.

Dr. J. P. Benaham, Cleveland. Originally the administration of an anesthetic was considered simply as a mechanical procedure, but to-day anesthesia is counted one of the important sciences.

It has made great strides since its discovery. Comparatively a new subject, I know of no branch of medical science which affords such a field for research, and many students are constantly engaged developing the knowledge of it.

The American Medical Association Committee on Anesthesia recently made its final report, after years of investigation. This report is a valuable document and should be carefully studied by all members of the profession.

The dental profession in the past have always been enthusiasts in the field of anesthetics, especially nitrous oxide and nitrous oxide and oxygen. Had it not been for their courage and perseverance, this most valuable anesthetic would have disappeared. The machines and appliances for administering nitrous oxide were all designed by dentists, and to-day the only machine for the administration of nitrous oxide and oxygen which

is absolutely reliable is that designed and perfected by Dr. Chas. K. Teter, of Cleveland, Ohio.

At the present time, however, the dental profession stands in a serious situation regarding anesthetics.

This wave of enthusiasm has swept down upon us without warning and the public are becoming educated to the possibilities and are clamoring for anesthetics. In the future, the demand will be felt by all members of the profession, instead of by a few, as in the past.

Many dentists are now using anesthetics, but the great majority have still to embrace the practice. Why? Because of the lack of educational facilities.

Realizing this, the manufacturers of gas and machines are engaging in a campaign of education. Some of this education is carried on as well as could be expected from a commercial effort; but without a doubt some of it is actually pernicious.

One company is now flooding the country at regular intervals with postal cards which bear the most extravagant statements.

The impression which it has attempted to create is that scientific knowledge and experience are entirely unnecessary for the administration of nitrous oxide and oxygen, when their type of machine is used.

I consider this kind of advertising as the grossest of insults to the rank and file of the profession, reflecting as it does upon their very intelligence.

As I said before, the present wave of enthusiasm over anesthetics has swept down upon us rather than approached gradually, and, therefore, our educational facilities have been unable to develop with the rush.

On this account we find many members of the profession, ambitious men, alive to the importance of the situation and anxious to administer anesthetics, but at the same time realizing their unpreparedness to do so intelligently and scientifically.

What is to be done for these men? Some remedy must be found.

I believe this to be a problem for the professional organization to handle.

In the first place, the instruction in this branch in our dental colleges should be placed upon a more thorough basis, and, secondly, I believe that opportunity should be created which will allow practitioners to avail themselves of the desired knowledge.

I would suggest that the local dental societies take this matter up, and possibly organize classes. In this way instructors of recognized ability could be induced to give courses. There would be many advantages to the plan. The student would be at home, would be on familiar ground, and would gain more from the teaching, for this reason.



It would allow prospective students to work up material for the class, and a man would see his own difficult cases successfully treated. In addition it would reduce the cost in both time and money to the student.

In his consideration of the subject of anesthesia the dentist, of course, looks at it from his own viewpoint.

The administration of anesthetics in the hospital and in the dental office are widely different practices. The conditions governing are entirely dissimilar.

For this reason the dentist upon taking up the study of this subject must first become familiar with what might be termed contributing conditions.

Importance of Suggestion.

Many things come under this heading. I believe the most important of all is the practice of suggestion.

This practice should ever be borne in mind by the man who administers anesthetics, for its successful application will be of more assistance to him than any other one thing outside of the anesthetic agent itself. It is really 90 per cent. of analgesia.

This is a broad subject which requires much study. It may be applied in a general way to nearly all patients, but must, according to circumstances, be made to fit each individual.

Upon coming in contact with the dentist the prospective patient begins to think and form opinions.

It is at this stage that the dentist must begin to apply his suggestion. He must lead the patient to formulate the proper opinions, and to think along favorable lines to prevent the formation of any unfavorable opinion concerning himself, his ability, his experience, his office, etc.

To permit this. 1st. The personality of the dentist is of the greatest importance; a pleasing, dignified bearing will be sure to gain the confidence of the patient at once.

The attire and so forth all come under this head.

The assistant and her personality come next. In all cases she should be a lady of ability and intelligence. Her assistance in the handling of women patients is invaluable.

About the office itself too much cannot be said. Its arrangement and its impressiveness all go to confirm the confidence of the patient in the man who is to perform the operation.

Preparation of the Patient.

The preparation of the patient is next in importance. Dr. W. H. DeFord's book devotes considerable space to this subject. All the prescribed precautions should be carefully followed out and upon



commencing the induction of anesthesia the beginner should try to imitate someone whose technique he may approve.

There will always be cases of anesthesia which will be more troublesome than the average, but, as a rule, the patient will simply go to sleep and awaken upon the withdrawal of the anesthetic, when it has been scientifically administered.

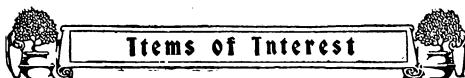
There are two classes of troubles which we may meet: those which are simply troublesome but not dangerous, and those which may give cause for alarm; these latter, fortunately, are seldom met with, but should always find the anesthetist prepared to deal with them. These are the cases which are a true test for the man. He should remain cool, and go to work, for this is a time for quick thinking and not excitement.

I cannot too highly recommend Dr. DeFord's book on anesthetics to the dentist. Written by a dentist of vast experience in anesthetics its aim is the instruction of the dentist, and while there are many works on this subject which are more exhaustive, still I believe that every dentist, from the beginner to the most experienced, will gain in knowledge of this subject by a careful study of this simple little book, "DeFord's Lectures on Anesthetics."

When I received Dr. Smith's communication,
Dr. Charles S. Cuttle, asking me to reply to his paper at the Asbury Park
Philadelphia. meeting, to say that I was surprised is putting it
mildly, for it was my intention to get into a corner,
listen and keep quiet. But it seems this is denied me, since a request
from so able a man as Dr. Smith amounts to a command.

Dr. Smith, in his most interesting thesis, "*The Scientific Administration of N₂O & O*," has so thoroughly covered the subject with plain facts and quotations from other eminent men interested in this work that it leaves little for one to discuss. It is my intention merely to emphasize a few of the valuable points brought out by this skilled teacher and anesthetist.

There is no doubt (as Dr. Smith has stated) that N₂O & O is one of, if not the most difficult, anesthetic to administer; at the same time the ability to administer this combination concerns the anesthetist and the operator (whether surgeon or dentist) far more than the patient, for, as has been shown in this paper, the post-operative effects of this anesthetic are entirely absent, or so slight as to be of little consequence. It has been demonstrated, not only by Dr. Smith, but by many other investigators, that a patient to whom N₂O & O is given goes to sleep easily and quietly, and during the period of operating, whether minor or major, the anesthetic itself tends to greatly lessen shock. Collins cites



many cases to make this point clear. As has been stated, it has no harmful effect upon the leukocytes, therefore decreases the danger in cases where infection exists, and this point should be of interest to the dental surgeon, for have we not heard it said from time immemorial that an exodontic operation should not be performed where an acute abscessed condition exists? N₂O & O delivered to the patient in proper proportions has never been known to effect either the liver or kidneys, while it has been clearly shown that unfavorable changes do take place in these organs when ether or chloroform are the chosen anesthetics. Bevan and Favill have both shown conclusively the harmful effects of these two agents upon the liver cells, death having been recorded in several instances some days after the administration.

Two other points perhaps well worth mentioning regarding the N₂O & O combination are: First, the lack of throat irritation during the induction period, which other anesthetics produce more or less; and, second, the safety of frequent administrations of these gases at short intervals. In my own practice I have resorted to the nasal inhaler three or four times during a single dental operation, and with absolutely no ill effects upon the patient—nausea never occurring.

You will find another point in favor of this anesthetic, and that is the rapidity with which a patient recovers consciousness. In a recent experience, anesthesia lasting forty-five minutes, the patient sufficiently regained consciousness to bid me good-bye while being rolled from the operating room—certainly not more than eight minutes after the withdrawal of the face mask.

Definite percentages of nitrous oxid, oxygen and air are most essential when inducing analgesia, and if this is taken into careful consideration, the result will be satisfactory. In producing accurate percentages, the apparatus used plays an important rôle. It should be one having gauges and control valves between cylinders and bags in order to prevent the pressure from cylinders coming directly upon the bags, and also one which will insure a definite percentage of each gas per hour. In analgesia it is also most important to have an air control which may be readily adjusted. If this type of apparatus has been your selection, after ascertaining the required percentages, it may be so set and in almost every instance you will find it unnecessary to again bother about anything but the air admitted.

A few words on positive suggestion and I will have finished. Since taking up this work I have made suggestion quite a study, and there are two words which I find it well never to utter to a patient, namely, "pain" and "hurt." I find that a suggestion containing either of these words



presents the undesirable thought first, and that the patient is usually inclined to think he does feel pain or is hurt, since I suggest it to him. This is particularly true with the nervous person. He will apparently have agonized moments, convincing me of this by immediately moving about, wrinkling up his face and telling me he is being hurt; thus my aim is defeated. I find that by saying instead, "You are doing very nicely," "I shall soon finish and you will not know that I have been working on your tooth," "You are resting quietly, but please do not go to sleep, I prefer that you keep your eyes open," or something along these lines, I am enabled to produce a beautiful analgesia, and my patient returns to complete consciousness in a splendid frame of mind.

Concluding, allow me to thank you for this privilege, and I also wish to thank Dr. Smith for the paper he prepared for us on this most interesting subject. For one as busy as he is, it certainly means an immense expenditure of time and energy to produce such a paper. The administration of nitrous oxid and oxygen for the purpose of relieving pain during dental operations is uppermost in the minds of the men of our own, as well as many of the medical profession for their own work, and it is well to bear in mind that one should prepare himself thoroughly before rushing into this work. Also that the gas-mixing machines are not toys, and must not be purchased one day from a dental salesman to be operated the next without careful study, and what seems most essential to me, instruction under a capable teacher in this branch of anesthetics, at least.

(To be continued)





Editorial

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The New Volume: Its Purposes and Policies.

With this issue we are pleased to present to our readers the first monthly quota of a new volume, and we would respectfully call attention to the new dress prepared for the magazine, as well as to additional departments.

We have in the past had attractive department headings, but we believe that those herein contained are an improvement over those of the past. They are in more classic style, and it is our intention to make the material which they announce likewise a progressive improvement over past achievements. We say achievements, because we sincerely believe that *ITEMS OF INTEREST* has been a lever to lift up the practice of dentistry, and we take pride in the fact.

In addition to the familiar departments contained in the volume of last year, we have planned two new departments, which will be different from anything that ever before has appeared in dental journalism. One of these begins with this issue, under the title "Around the Table," for an explanation of which the reader is referred to the department itself. Another, which we hope to present for the first time in the February number, will be entitled "Exodontia." This will be the third specialty of dentistry given a place in *ITEMS OF INTEREST*.



With the beginning of the 1897 volume we inaugurated a department for Orthodontia, and by this act believe that we did much toward creating out of this branch of dentistry a real specialty. A few years later, at which time there was no one specializing in what was then called mechanical dentistry, we coined the word "Prosthodontia," and established a separate department under that title. We announced then that if dental prosthesis was to advance it would be necessary to endow it with some dignity, that its practitioners might not be ashamed to admit the nature of their work. In this department we presented the remarkable series by Dr. Hart J. Goslee on "Crown and Bridgework," and the papers of the immortal Bonwill and others on the scientific articulation of teeth. To-day the art of prosthodontia takes its place side by side in importance with the practice of general dentistry, and its specialists are as much esteemed as the orthodontists.

Now the term "Exodontia" has been coined, meaning particularly the extraction of teeth. Dr. Winter has written an important book on this subject, using this title, and Dr. Winter has kindly agreed to prepare for us the article with which we shall open the department, probably next month.

We have perhaps never before said very much about what we consider our policy, and even now **"The Policy of Items of Interest."** we shall fear to say but little, lest we seem boastful.

But, whereas some journals are content to publish the articles which are offered, or which come in through societies, thus being, as one might say, simple recorders of current literature, we have never been quite content to follow such a path of inertia. When we have felt that a certain phase of practice might be exploited with advantage to the profession at large, we have used every effort to induce prominent and capable men to aid us in leading the dental mind into these newer channels.

We prefer not to recount the accomplishments of the past, because of these our readers are fully cognizant, but of the immediate future we may announce two special purposes as the leading factors of our present policy.

One of these purposes is the establishment of a better method in the practice of filling bicuspid and molar teeth. Dr. Black did establish

the fact that a potent factor in the salvation of a tooth attacked by caries is the full restoration of approximal form and of approximal contact between contiguous teeth. As our readers know, we have already begun a campaign for a still further safeguarding of the inter-proximal tissues by the full restoration of the cusps and sulci, ridges and grooves which in nature are found in the morsal surfaces of the grinding teeth. It may seem to some that we have already printed enough on this subject, but really we have discovered an almost untilled field of dental endeavor, and with the plans which we have in view we do not hesitate to prophesy that within a year, or at most two years, State Society programs will contain innumerable papers and clinics dealing with the subject of the preservation of the patient's health by the restoration of the masticatory functions of his teeth. In this particular issue we are pleased to present a fine contribution from Dr. Pond, who makes a plea for the restoration of normal form with amalgam. The models presented by the author with his paper are really masterpieces, and important because they prove the possibilities. In this connection we would say in passing that during the past year we have found it extremely difficult to adequately illustrate these occlusal surface restorations. Recently we have come into touch with a photographer who seems to have the skill to overcome the obstacles. We think our readers will agree with us that his work on Dr. Pond's illustrations is very fine.

The other special purpose to which we dedicate this new volume is the improvement of dental statutes, with the end in view of so changing the laws that the conviction of illegal practitioners of dentistry shall be simplified. It has been truly said that no law ever written has ever eradicated an evil. But where the law has been sufficiently strong, and efficiently administered, evil doing has always been minimized. The main difficulty with the dental statutes of the past has been that there has been no provision made for their adequate administration. But this can be corrected in the future. Statutes can be formulated, must be formulated, which will render it possible for the dentists themselves to drive out the incompetents and the illegal men who are preying upon the public health.

To these two main purposes, and to the general improvement of dental practice, of the dental society and of the dentist himself, ITEMS OF INTEREST promises the full force of its influence.



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FOR YEARS we have wanted a new department in ITEMS OF INTEREST,

- ❖ but we have been very much in the position of the little girl whose father asked her, "What do you want Santa Claus to bring you for Christmas?" and who, after deep thought, replied: "I don't know whether to ask for a hobby-horse or a pearl necklace; but I guess I'll take the pearl necklace, because all the other children have hobby-horses, and I could ride theirs.

❖ ❖ ❖

THE LITTLE GIRL certainly was a wise one, and we can't go wrong if we

- ❖ adopt her philosophy. Don't see the connection? Suppose we make it plainer. We have already a number of departments which, analyzed, come to this; we have been publishing articles prepared especially for us; articles read before dental societies; discussions thereon; reports of clinics, and editorials. All of these are important, especially the articles prepared exclusively for us, to which, as the great political parties always say in their ante-election platforms, "we point with pride." But important as they have been, and will be, the material in these departments has been scientific, serious, sedate and sometimes lengthy. For some reason, which is difficult to analyze, a certain proportion of the dental profession apparently are not quite contented with a dental journal, unless they can find in it some "short" articles.

❖ ❖ ❖

IF WE PLACE our ear to the ground, Indian style, like a far cry across

- ❖ the dental desert we hear a demand for "short" articles. Not for practical articles; nor critical articles; nor humorous articles; nor news articles; nor in fact any particular kind of articles, except just "short" articles. There seems to be an almost pathetic yearning in the breasts of many dentists for short articles. Paragraphs that can be read between portions at luncheon, and digested, or indigested, as the case may be, along with the crackers and cream.



BUT WE ARE wandering from our mutton—hobby-horse rather. So let us

- ❖ flock back to that noble stead. Well, other editors evidently have
- ❖ played Indian, and have heard the ten thousand dentists crying for the
- ❖ ten-line thesis. And they have supplied the demand. This much-beloved
- ❖ hobby of the so-called busy dentist has been brought forth from vari-
- ❖ ous journalistic stables, and put through his paces before the ecstatic
- ❖ throng, variously caparisoned, and under numerous names, such as
- ❖ "Timely Topics," "Dental Don'ts," "Practical Points," "Noteworthy
- ❖ Notes," etc., etc., and other aliterative aliases. But remove the blanket,
- ❖ and the blinders, and you will find this "Hobby" is always the same old
- ❖ horse.

❖ ❖ ❖

CONSEQUENTLY, like the little girl deciding about the Christmas present,

- ❖ we have concluded if possible to offer our readers, with the New Year,
- ❖ a different breed of equine. One that can trot around the track in just as
- ❖ short steps as the dear old "Hobby," but at a newer and faster pace.

❖ ❖ ❖

IN THIS CONNECTION you are probably wondering why this department

- ❖ is to be called "Around the Table." You observe that the title is not
- ❖ aliterative, and you wonder if, by lifting the new style of blanket, you
- ❖ would find that it hides the same little old animal. Well, you would not.
- ❖ You would discover that the time-honored "Hobby" has run his race,
- ❖ but that he has sired a promising colt—a prancing pony that will remind
- ❖ you of the pony-post horses of a hundred years ago, whose fleet feet
- ❖ carried the messages of the people to the far corners of the country.
- ❖ And it is our hope and belief that this swifter-moving son of a popular
- ❖ sire will make a good record carrying messages which, though perhaps
- ❖ short, will be as telegrams compared to letters; a compact expression
- ❖ of important facts.

❖ ❖ ❖

IN FURTHER ELUCIDATION let us explain more in detail why we have

- ❖ chosen the caption of this department. The scientists, investigators and
- ❖ writers of the profession naturally become widely known through their
- ❖ publications, and, as one might say, are "the big men in dentistry."
- ❖ Being big men, they write big papers; papers that occupy much space,
- ❖ and thus help to encourage the manufacturers of printer's ink, by using
- ❖ up their products. There is one curious fact about these big writers.
- ❖ Of course they have big ideas, but often they use such big words, and
- ❖ so many of them, that really it takes a lot of a fellow's time to separate
- ❖ the big idea from the lengthy language. And this perhaps is the main
- ❖ factor in the etiology of the fever for few-word papers.

❖ ❖ ❖

OF COURSE the editors can find those big ideas, and could prune away the

- ❖ wordy weeds, so that the big idea might be as conspicuous as a date
- ❖ palm in a desert. And sometimes they do this, these editors, working
- ❖ in behalf of those short article cranks.

❖ ❖ ❖

AND THEN, after the little editor has weeded and pruned the big article,

- ❖ so that the big idea is really comprehensible to the ordinary mind, Lo!



❖ The Big Man, the author, sends in a wireless, reading, "Let me see proof before publication," and there you are. The editor knows right off what is coming. But hoping for the best, he sends the big man his diminished article, praying that he might forget what he had written in the first place. But no! The zealous typewriter (or is she a typewritist?) has furnished that author person with a carbon copy, and, by George, he misses all the words that the editor had removed, and, worse yet, he replaces them. And worse yetter still, he interpolates a few extra adjectives, conjunctions and exclamation points, just to make the language a little more lustrous, and the meaning a little less lucid.

☒ ☒ ☒

MOST OF THESE big men read their papers before societies. Now these big

❖ societies have big men of their own, and of course they must have a chance at the visitor's big idea, if only to show him how little, or how old (usually twenty years old), or how useless it is. These local big men are all down on the programme, and are called on as soon as the visiting essayist stops reading his paper, and very often a local man's talk is twice as long as the paper. Usually there are two or three of these local professional discussionists on the programme of the evening, and by the time they finish up their "few remarks," the evening itself is nearly as much used up as the audience.

☒ ☒ ☒

THEN THE VISITING scientist closes the discussion, and tries to make

❖ those local men sorry they said so much, and sometimes he succeeds so well that the local men telephone to the secretary for the stenographer's report, and when they get it, they change it. It would be all right if they would alter these discussions with a pair of scissors, but that is not the common habit. More often the changes are made with pen and ink, a dictionary, and ten or twelve books of reference. This of course makes the discussion better, but also longer.

☒ ☒ ☒

AFTER ALL of the ideas, big and little, have escaped into the atmosphere

❖ of the meeting room, some one with a keen sense of appropriateness remarks from the back benches, "Move we adjourn," and thirty-odd men exclaim, "Second the motion." Then the entire six hundred and eight men present vote in the affirmative.

☒ ☒ ☒

ABOUT FIFTEEN MINUTES after the big meeting adjourns, the little

❖ meetings convene. Usually these meetings include small groups of four, six or ten men, and they hurry away from the formal atmosphere of the room in the Academy over to the more social air of the rathskellar or grill. Here they sit "Around the Table," and then, good friends, the paper of the evening is discussed—really discussed.

☒ ☒ ☒

MANY AN ESSAYIST has wended his way back home, pleased with the

❖ impression he had made, when in reality he knows nothing at all about the impression he may have left behind him. But if he could know all that had been said around the little tables by all the little men whose names never appear on programmes, and whose voices are seldom heard in the dissensions—I should say discussions—of the scientists, such knowledge would be enlightening.

AND IT WOULD be useful too. Because these scientists are really working

- ❖ for progress; for the best interest of their profession. Let there be no
- ❖ mistake about that. If besides all the pleasant things, which the leaders
- ❖ in the locality of the meeting might say before their faces, these writers
- ❖ of papers could also hear what is said by the rank and file "Around
- ❖ the Tables" after the meeting, they could much better comprehend the
- ❖ value and possible utility of their efforts.

❖ ❖ ❖

MOREOVER, these bashful, timid men, who never open their mouths in

- ❖ meetings, often have mighty good ideas—ideas that would be very accept-
- ❖ able to the majority of dentists if they could only get into print. Do
- ❖ you begin to comprehend the purposes to which this department is to
- ❖ be dedicated?

❖ ❖ ❖

THE WRITER necessarily is present at a great many dental meetings, and

- ❖ quite frequently sits with those that gather around tables afterwards.
- ❖ For a long time he has known that hundreds of good and useful ideas
- ❖ are uttered at these circular sessions and never published. With the
- ❖ present department in view, he has been recording these practical sug-
- ❖ gestions made by practical dentists, and has on hand at the present
- ❖ time enough of such material to feel assured that this department can
- ❖ be made of interest and value for at least a year.

❖ ❖ ❖

IN ADDITION to the notes gathered at previous meetings "Around the

- ❖ Table," and already filed away, we have the promise of co-operation
- ❖ from a number of men scattered about the country, so that the depart-
- ❖ ment will contain the "scraps from many tables," as it were.

❖ ❖ ❖

MOREOVER, we anticipate assistance from our regular subscribers, and

- ❖ from you in particular, who are reading this message. Whether you are
- ❖ an experienced writer or a mere tyro, an old graduate or a new, remem-
- ❖ ber that progress depends upon exchange of ideas. If a professional
- ❖ brother at any time has imparted to you a practical idea of any sort
- ❖ which has in any way lightened or lessened your work, you should share
- ❖ it with others. Or if you have by force of circumstances worked your-
- ❖ self out of a difficulty, and thus solved a problem in practice; or if you
- ❖ know anything apparently of little importance, but which you find of
- ❖ such usefulness to yourself that you would be sorry if deprived of the
- ❖ method, write the best description of the idea that you can, and send it
- ❖ to this department. Don't bother about the language beyond making
- ❖ your idea clear. Just remember that the idea itself is the important
- ❖ thing, and leave it to us to dress it up, if you prefer. Whenever you
- ❖ find an idea in this department which you consider useful, or whenever
- ❖ you know of a better method than one herein described, just imagine
- ❖ yourself sitting "Around the Table," with all your other brothers who
- ❖ are ITEMS OF INTEREST readers, and make your little speech, that
- ❖ you may do your share in making this department interesting and useful.



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National Society Meetings.

NATIONAL DENTAL ASSOCIATION, Rochester, N. Y., July 7, 8, 9, 10, 1914.

AMERICAN SOCIETY OF ORTHODONTISTS, Toronto, Can., July 2, 3, 4, 1914.

PANAMA-PACIFIC DENTAL CONGRESS, San Francisco, Calif., 1915.

NATIONAL ASSOCIATION OF DENTAL FACULTIES AND INSTITUTE OF DENTAL PEDAGOGICS, Buffalo, N. Y., January 26, 1914.

State Society Meetings.

ARKANSAS STATE DENTAL SOCIETY, Little Rock, Ark.

Secretary, Dr. C. L. Hunt, Fort Smith, Ark.

COLORADO STATE DENTAL SOCIETY, Manitou, Colo., June 18-20, 1914.

Secretary, Dr. E. W. Spencer, 120 Pope Block, Pueblo, Colo.

CONNECTICUT STATE DENTAL ASSOCIATION, Hartford, Conn., April 21-23, 1914.

Secretary, Dr. Arthur V. Prentis, New London, Conn.

FLORIDA STATE DENTAL SOCIETY.

Secretary, Dr. Alice P. Butler, Gainesville, Fla.

GEORGE STATE DENTAL SOCIETY, Atlanta, Ga., June 4-6, 1914.

Secretary, Dr. M. M. Forbes, Candler Bldg., Atlanta, Ga.



ILLINOIS STATE DENTAL SOCIETY, Chicago, Ill., March 23-26, 1914.

Secretary, Dr. Henry L. Whipple, Quincy, Ill.

INDIANA STATE DENTAL ASSOCIATION, Indianapolis, Ind., May 19-21, 1914.

Secretary, Dr. Otto U. King, Huntington, Ind.

KENTUCKY STATE DENTAL ASSOCIATION, Louisville, Ky., March 9-12, 1914.

Secretary, Dr. Chas. R. Shacklette, Atherton Bldg., Louisville, Ky.

MARYLAND STATE DENTAL SOCIETY.

Secretary, Dr. F. W. Drew, 701 N. Howard St., Baltimore, Md.

MICHIGAN STATE DENTAL SOCIETY, Detroit, Mich., April 9-11, 1914.

Secretary, Dr. F. Ward Howlett, Jackson, Mich.

MINNESOTA STATE DENTAL ASSOCIATION, Duluth, Minn., August 6-8, 1914.

Secretary, Dr. Benjamin Sandy, Syndicate Bldg., Minneapolis, Minn.

MISSOURI STATE DENTAL ASSOCIATION, St. Louis, Mo., April 21-22, 1914.

Secretary, Dr. S. C. A. Rubey, Warrensburg, Mo.

MISSISSIPPI DENTAL ASSOCIATION, Vicksburg, Miss., June 23-25, 1914.

Secretary, Dr. M. B. Varnado, Osyka, Miss.

MONTANA STATE DENTAL SOCIETY, Great Falls, Montana, June, 1914.

Secretary, Dr. F. W. Adams, 14-15 Chicago Block, Billings, Montana.

NEBRASKA STATE DENTAL SOCIETY, Lincoln, Neb., May 19-21, 1914.

Secretary, Dr. H. J. Porter, Cambridge, Neb.

NEW HAMPSHIRE STATE DENTAL SOCIETY, Weirs, N. H., June 17-19, 1914.

Secretary, Dr. Louis I. Moulton, Concord, N. H.

NEW JERSEY STATE DENTAL SOCIETY, Ocean Grove, N. J., July 15-17, 1914.

Secretary, Dr. John C. Forsyth, 430 E. State St., Trenton, N. J.

NEW YORK STATE DENTAL SOCIETY, Albany, N. Y., May 14-16, 1914.

Secretary, Dr. A. P. Burkhardt, 52 Genesee St., Auburn, N. Y.

NORTH CAROLINA DENTAL SOCIETY, Hendersonville, N. C., June 24-27, 1914.

Secretary, Dr. J. Martin Fleming, Raleigh, N. C.

OHIO STATE DENTAL SOCIETY, Columbus, O., December 1-3, 1914.

Secretary, Dr. F. R. Chapman, 305 Schultz Bldg., Columbus, O.

PENNSYLVANIA STATE DENTAL SOCIETY, Phila., Pa., June 30, July 1-2, 1914.

Secretary, Dr. Luther M. Weaver, Phila., Pa.

TENNESSEE STATE DENTAL ASSOCIATION, Chattanooga, Tenn., June 4-6, 1914.

Secretary, Dr. C. O. Rhea, 625½ Church St., Nashville, Tenn.



TEXAS STATE DENTAL ASSOCIATION, Fort Worth, Texas, April 13-17, 1914.

Secretary, Dr. J. G. Fife, Dallas, Texas.

UTAH STATE DENTAL SOCIETY, Logan, Utah, June 19-20, 1914.

Secretary, Dr. I. P. Stewart, 1st Nat. Bank Bldg., Logan, Utah.

VERMONT STATE DENTAL SOCIETY, Rutland, Vt., May 21-23, 1914.

Secretary, Dr. P. M. Williams, Rutland, Vt.

WEST VIRGINIA STATE DENTAL SOCIETY, Huntington, W. Va., August 12-14, 1914.

Secretary, Dr. A. C. Plant, 802 Schmulbach Bldg., Wheeling, W. Va.

WISCONSIN STATE DENTAL SOCIETY, Fond-du-Lac, Wis., July 14-16, 1914.

Secretary, Dr. O. G. Krause, Wells Bldg., Milwaukee, Wis.

National Association of Dental Faculties.

The annual meeting of the National Association of Dental Faculties will be held at the Iroquois Hotel, Buffalo, N. Y., January 26, 1914.

Executive Committee meeting 9 A.M.; general session to 10 A.M.

B. HOLLY SMITH, Chairman, Executive Com.

CHARLES CHANNING ALLEN, Secretary.

First District Dental Society.

The third annual banquet of the First District Dental Society, of the State of New York, will be held at the Hotel Astor (Broadway and 44th Street, New York City), on January 24, 1914, at 6 P.M., to celebrate its forty-ninth anniversary.

All ethical practitioners are invited to attend.

DINNER COMMITTEE.

The Panama-Pacific Dental Congress.

The work of the Committee of Organization of the Panama-Pacific Dental Congress is rapidly assuming definite form, and the entire general plan of the Congress will shortly be announced.

The floor plans of the new Municipal Auditorium, in which the Congress will meet, will be sent to all prospective exhibitors within the next thirty days. The exhibits will be held in the main hall of the Auditorium, a room 190 feet square, affording ample space and light, and from present indications all of this great area will be fully occupied. It is planned to make these exhibits and their accompanying clinics one of



the great features of the Congress, and they will, aside from the general program, afford a liberal education to anyone interested in modern dentistry.

Space in the Auditorium has been reserved for the general sessions of the Congress, and for the meetings of its sections, and also for the dental societies and fraternities which will meet in San Francisco during the Congress.

Three hundred thousand gum-stickers bearing the seal and date of the Congress will shortly be placed in the hands of dental dealers throughout the country, and every dentist who receives goods or letters from them will in this way be reminded that it is time to prepare for a trip to San Francisco in August of 1915 to attend the Panama-Pacific Dental Congress and the Panama-Pacific International Exposition.

Kings County Dental Society.

The first meeting of the Kings County Dental Society for the year 1913-14 was held at the Brooklyn Masonic Temple on Thursday evening, October 9, 1913.

The Chairman, Dr. Simon Shapiro, in his annual address reviewed the various activities of the Society during last year, and the progress it has made, and then spoke of the bright future he foresaw for it during the coming year. He laid particular stress on the excellent work accomplished by the Oral Hygiene Committee, it having succeeded in establishing a dental clinic in P. S. No. 109 in the Brownsville section of Brooklyn, where ten dentists of that section are giving dental services gratis to the poor children of that school. The outfit and supplies were obtained by voluntary contributions and the hearty co-operation of the Dental Supply Depots. Similar clinics for other sections of Brooklyn are being contemplated by the society and will be instituted in the near future.

The lecturer of the evening was Dr. Alfred Russell Starr, Professor of Operative Dentistry in the New York College of Dentistry. His subject was the preparation of cavities, paying particular attention to those for gold inlays. The paper was instructive, and appreciated by those present, judging from the attention he received and the applause. Dr. F. T. VanWoert discussed the paper. In a general discussion that followed Drs. Prensky, Nevin, Robbins and Herman participated.

THE EXECUTIVE COMMITTEE.